THE COMPLETE

Planter *and* Cyderiſt:

Or, a NEW METHOD of Planting

CYDER-APPLE,

AND

PERRY-PEAR-TREES;

AND THE

Moſt approved Ways of Making CYDER.

In TWO PARTS.

PART I. Shewing, among other Particulars, how thouſands of Acres on the Sides of barren Hills and other waſte Grounds, may be converted into fruitful Orchards at a ſmall Expence. How Apple and Pear Trees may be made to grow to Perfection in half the uſual Time. How to manage an Orchard that it ſhall never miſs bearing, *&c.*

PART II. How to make CYDER and PERRY various Ways, as practiſed in DEVONSHIRE and HEREFORDSHIRE, *&c.* How to diſtil CYDER SPIRITS; with a Propoſal for making a ſtrong bodied Cyder, as a noble Antiſcorbutic for the Service of his Majeſty's Navy, *&c.*

By WILLIAM ELLIS,

Of LITTLE-GADDESDEN in HERTFORDSHIRE,

Author of ſeveral TREATISES on HUSBANDRY, *&c.*

LONDON,

Printed for J. REEVES: And Sold by T. FIELD, at the *Wheat-ſheaf*, the Corner of *Pater-noſter Row* in *Cheapſide*.

M DCC LVI. [Price 1*s.* 6*d.*

THE CONTENTS.

THE Introduction. Page 1

PART I.

Of Planting Cyder Apple and Perry Pear-trees.

How Thouſands of Acres of barren and other Lands may be improved and rendered very profitable, by planting them with Apple and Pear-trees for Cyder and Perry. p. 7

When beſt to plant Trees, &c. p. 11

Sir Jonas More's *Scheme, ſhewing how Land may be improved in a very high Degree at an inconſiderable Expence, by planting it with Cyder-apple and Currant-trees, Gooſberry-buſhes,* &c. p. 12

Of planting an Orchard, according to Mr. Miller. p. 15

How to order an Orchard that it ſhall never miſs bearing. p. 16

How one of the pooreſt Orchards was made one of the richeſt at a ſmall Expence. p. 18

The Profit and Pleaſure of planting Apple and Pear-trees in plow'd Ground: How to ſecure them from Damage, and the Method of ſowing Grain between them, by the excellent four-wheel Drill-plow; and of Howing the interval Land, by a two-wheel Horſe-break. p. 20

How to forward the Growth of Fruit-trees with the greateſt Expedition, cauſe their Bloſſoms to knit, and their Fruit to ſtand. p. 25

Several other Ways to forward the Growth of Fruit-trees with much Expedition, and cauſe the Bloſſoms to knit, the Fruit to grow larger and ſtick faſt on the trees. p. 27

CONTENTS.

How the Sides of barren Hills and other barren Land may be made ſo fertile as to cauſe Apple and Pear-trees to grow to much Advantage. p. 28

How to recover and improve the famous Kentiſh *Pippin by double Grafting it.* p. 29

Of improving the Pear, the Apple, the Peach, the Nectarine, and the Plumb, &c. *by twice grafting and innoculating.* p. 30

What an old Author ſays, about grafting an old Stock ſeveral Times. p. 31

The Method practiſed in the Southams. *When an Apple-tree fails bearing, either by ſuperfluity of Branches, or declines by overbearing; or ſometimes, when a Perſon has a mind to alter the Fruit.* p. 32

How to ſend Trees, ſo as to receive no Damage by long Carriage. p. 33

A new Method, ſhewing how to convert the barren Sides of Hills into profitable Orchards, at a ſmall Expence. ibid.

A further Account, ſhewing how the Roots of Apple and Pear-trees may be water'd as they ſtand on the Sides of Hills, by Showers of Rain. p. 36

Of making Baſons or Platforms of Earth over the Roots of the Apple or Pear-trees. p. 38

The many and great Advantages that would certainly accrue from planting Orchards on the Sides of barren Hills. p. 39

Another Way to keep the Roots of Cyder-Apple and Perry Pear-trees always in a moiſt Condition, though planted on the Side of a barren Hill. p. 41

The Enemies of Orchards; and their Remedy. p. 42

How to prevent and kill Caterpillars, Lice, or Ants on Standard Fruit-trees, and clear them of Moſs and Suckers. p. 43

How Cyder Apple and Perry Pear-trees, by the Application of a compound Manure, may be made to bear abundance of Fruit, and grow into Perfection in almoſt

CONTENTS.

moſt half the Time that neglected Trees do; and how by the ſame Means Oak and other Timber Trees may be made to grow with the like Advantage. p. 43
Of an Artificial Compoſt, or Compound Manure. p. 44
Of the beſt Sort of Devonſhire *and* Corniſh *Cyder-apples, and to plant the Trees according to the Practice in thoſe Counties.*
To plant an Apple-tree in the beſt Manner. p. 46
Caggagee-*Cyder Apple-trees, how planted by the Author.* p. 48
Of the excellent Jerſey *bitter-ſweet Cyder-Apple; and the* Snap *Cyder-apple.* p 49
The Golden-pippin, *grafted on the* Red-ſtreak *Tree.* p. 50
Cyder-apples, that by ſome are eſteemed the beſt of all others, for making a ſuperlative kind of Cyder. ibid.

PART II.

Of making Cyder.

Of the Apple-Mill. p. 51
The Method of preparing a Caſk for Cyder. ibid.
The Hertfordſhire *Way of burning the Inſide of a tainted Caſk, as a certain Cure for the ſame, at a very little Expence and Trouble, which I think is a better Way than what they practiſe in* Devonſhire. p. 52
How to burn the Inſide of a tainted Caſk. p. 55
Another Method to burn the Inſide of a tainted Caſk. p. 56
A new and excellent Method of making and ordering Cyder, as practiſed in Devonſhire. p. 57
How to make very ſmooth Cyder, and prevent its Fretting by racking of it, &c. p. 60
How Cyder made with all Caggagee *Apples was preſented to his Majeſty King* George, *and much admired by him.* p. 61
How to make Cyder for Sale, that ſhall exceed in Strength and Goodneſs, other Saleſmen's Cyder. p. 62

CONTENTS.

What Quantity of Spirit, Cherry or Apple-juice will yield in Diſtillation. p. 64
The Manner of Diſtilling the Grounds or Lees of Cyder, as practiſed in Herefordſhire. ibid.
Plumb Cyder. p. 65
A Liquor made with Apples and Elder-berries. ibid.
To make auſtere Apples produce a Mild Cyder. p. 66
To make a pleaſant Summer Cyder for the firſt Drinking, by an old Receipt. ibid.
The Method of making Cyder at Dartford *in* Kent. p. 67
Mrs. Fenn's *Method of making a Kilderkin of Cyder.* ibid.
The bad and good Effects of mixing Cyder with Malt. p. 68
Method practiſed by a Surgeon living in Hertfordſhire *in making Cyder.* ibid.
A Buckingham *Farmer's Method of making Cyder.* p. 69
A Hertfordſhire *Farmer's Miſtake in the Management of his Cyder.* ibid.
Unrack'd Cyder how it proved. ibid.
How to make Cyder with Apples and Turneps. p. 70
A Farmer's Method of making a Cyder with Turneps and Crabs. ibid.
How a London *Cyder Merchant made his Turnep Cyder.* p. 70
How to make a Hogſhead of Cyder out of twelve Buſhels of Apples. p. 71
Particular Obſervations relating to Cyder by a Dunſtable *Cyderiſt.* p. 72
How to preſerve Apples ſound in Winter. p. 73
How to make the beſt Cyder of Crabs. ibid.
Cyder ſaid to be made with Apples, Turneps, and decayed Raiſins. ibid.
Another Way to preſerve Fruit. ibid.
The Method practiſed in the Southams *in the Management*

nagement of Cyder from the Preſs till the Fermentation is over. p. 74
How a Gentleman by improper Management turned his Cyder preſently into Vinegar. p. 75
An Account of various indirect Methods made uſe of by ignorant Perſons in the Management of Cyder.
A Gentleman adviſed wrong to get his Cyder fine. ibid.
Pome-Pirk or Water Cyder made by the Author. p. 78
Obſervations on the ſaid Proceſs. ibid.
Double Cyder or White Wine made and improved by one of the greateſt Virtuoſo's of the preſent Age. p. 79
Perry made from the Bell-Orange *Pear, and others.* p. 80
Of Fining, Reliſhing, and Preſerving Cyder. p. 81
An Account given me by a Herefordſhire *Man how to fine and preſerve Cyder.* p. 82
A Moakiſh taſted Cyder, how cured. p. 83
To ſtop the Fret and fine a Hogſhead of Cyder. ibid.
To cure Ropy or Viſcid Wine, or Cyder. ibid.
How to improve Cyder with Raiſin Stalks. p. 84
To improve Cyder with Sugar-candy, by a particular Receipt. ibid.
An Account of a conſummate Impoſition practiſed by an Innkeeper, who ſold an artificial Red Wine for true genuine foreign Red Port many Years, without being miſtruſted. ibid.
To Preſerve and Reliſh Cyder. p. 86
To prevent Cyder from turning ſour. p. 87
To take off the Sourneſs of Cyder. ibid.
To prevent Sourneſs by Muſtard Seed. ibid.
Cyder, how rack'd and preſerved in Herefordſhire. p. 88
Cyder, how made at Croſley *near* Town-Malden *in* Kent. ibid.
Cyder made early and late in the Year; difference of the two Sorts. ibid.
Cyder, how made at Elminſter *in* Sommerſetſhire. p. 89

CONTENTS.

A London *Surgeon's Scheme for improving Cyder.* p. 89
Cyder how made about Berkley *in* Glouceſterſhire.
Perry made early in the Year. p. 90
Perry made late in the Year. p. 91
To make Pear Wine of Perry. p. 92
Of diſtilling Spirits or Brandy from Cyder; and of the Herefordſhire *Method of doing it.* p. 93
Spirits or Brandy diſtilled from a Mixture of Cyder, Grounds of Malt-liquor, and Treacle. p. 94
How a ſtronger-bodied Cyder than ordinary may be made from Apples, without the Aſſiſtance of Sugar or Spirits, or any other Ingredient whatever. p. 95
A neceſſary Caution to be obſerved in making Cyder, given the Author by a Virtuoſo. p. 96
How to ſtrengthen and preſerve a Kilderkin or half Hogſhead of Cyder. ibid.
Another Improvement of Cyder. p. 97
Of boiled Cyder in Devonſhire. ibid.
Of boiled Cyder in Herefordſhire. ibid.
How a ſerviceable ſtrong bodied Cyder may be made uſe of in his Majeſty's Navy, as Seamens common Drink, which will better preſerve their Health than their much hopp'd Small Beer uſually allow'd them. p. 98
Of Perry. p. 100
How Perry was made, to counterfeit Canary. ibid.

THE

THE INTRODUCTION.

THE following Directions for planting Apple-Trees, making Cyder, *&c.* were collected from my own Experience, and that of ſeveral ingenious Perſons in different Parts of *England*; who have honoured me with their Correſpondence. I ſhall beg leave by way of *Introduction*, to prefix to theſe Sheets an ingenious Diſſertation, which was publiſhed in the *London Gazetteer*, *September* 22, 1753, and contains the following judicious Obſervations.

" Perhaps, at this Time, I may be ſome-what " ſingular in my Opinion, when I ſay I am " *Engliſhman* enough to imagine, that many great " and happy Advantages muſt particularly accrue " to the better Sort of the Inhabitants of this " Iſland, and alſo to the Nation in general, from " a Conſumption of *Engliſh* Cyder inſtead of fo- " reign Wines. And that therefore it is a Duty, " incumbent upon thoſe who have any Sparks of " old *Engliſh* Virtue in their Breaſts, to appropriate " the beſt Apartments in their Cellars for nouriſh- " ing the Product of our own Apple-Vintage; and " to give it the Superiority on the Side-Board to " all Exotic Wines, and particularly to thoſe of " *France*. For, I believe it will be found on the " niceſt Examination, that *Engliſh* Cyder has as

" many delectable Qualities as the beſt kind of " foreign Wines. Does it not equally invigorate " the Senſes, mitigate Sorrow, help Digeſtion, " and precipitate the Lees of Melancholy? Its " Complexion is gay and ſmiling, its Smell fra- " grant, and its Taſte, delicious: Beſides, it is " not only light and volatile, but it is alſo an ex- " cellent Diuretic, a ſovereign Remedy in ſome " Diſeaſes, and of great Efficacy in others. Our " Cyders alſo afford us as much Variety to the " Palate, as the Wines of Foreigners: Therefore, " why may not the former plead its Merit, and " be intitled to the venerable Ornament of the " Silver Collar and Label, with as much juſtice " as the latter; eſpecially as Cyder in this Coun- " try, ſtands upon the ſame footing with Wine, " as to Antiquity.

" The *Stirom*, *Redſtreak*, *Woodcock*, *Pip-* " *pin*, *Moyle*, *Eliot*, and *Permain*; have each " their different Liquor. But when the five laſt " are blended together, each ſtriving to correct " the other; they afford a pleaſing Mixture, " nor is it poſſible to diſtinguiſh the particular " Taſte of either. Their genuine Reliſh being " thus improved by Art and Years, aſſumes the " Flavour of foreign Wines, having frequently " paſſed for the Product of *Spain*, *France*, *Portu-* " *gal*, and *Germany*; even in the Judgment of the " moſt nice and delicate Palates: Which is thus " beautifully expreſſed by our *Aricomian* Poet.

" Some Cyders have by Art, or Age unlearn'd
" Their genuine Reliſh, and of ſundry Vines
" Aſſum'd their Flavour; one ſort counterfeits
" The *Spaniſh* Product; this, to *Gauls* has ſeem'd
" The ſparkling Nectar of *Champaigne*; with that,
" A *German* oft has ſwill'd his Throat, and ſworn,
" Deluded, that imperial *Rhine* beſtow'd
" The gen'rous Rummer; whilſt the Owner pleas'd,

" Laughs

" Laughs inly at his Gueſts, thus entertain'd
" With foreign Vintage from his Cyder Caſk."

' But Intemperance is ſuch a favourite Virtue, ' and Extravagance ſo prevailing a Faſhion, a- ' mong the preſent Race of our well-poliſhed ' Countrymen, that, with them, nothing can in- ' vigorate decayed Health, and give the enlivened ' Flow to Fancy, when the Bottle is exhauſted of ' the *dear* Product of the *French* Vintages; though ' the Wines of *France* are attended with this Fatality ' in *England*, that while the Conſumer feels it hurt ' the natural Body, the whole Nation is ſufficient- ' ly ſenſible, how the political Body is impaired ' by ſuch an unnatural Encouragement given to ' the beſt marketable Commodity of our natural ' Enemy. The *French* indeed are not ſo ſtrangely ' impolitic; for though they prefer our Cyder to ' their own Wines, yet we are little the better for ' their Conſumption of this Commodity, becauſe ' they have been long endeavouring to make *Po- ' mona* the Rival of *Bacchus*, on the very Banks ' of the *Seine*, the *Loire*, and the *Garronne*: But ' their Apple-Plantation will never be able to vie ' with thoſe on the Banks of the *Severn*, the *Wye*, ' and the *Avon*.

' If the generous Cyders of *Herefordſhire*, *Wor- ' ceſterſhire*, and *Devonſhire*, were the Product of ' the Provinces of *Champagne*, *Burgundy*, or *Guienne*, ' they would be as much ſought after, and ad- ' mired in *England*, as the beſt Wines of *France*, ' however pleaſant to the Taſte, or exhileratng to ' Spirits; yet our Cyder yields in neither Reſpect ' to the Vine: For,

" The *Moyle*,
" And taſteful *Pippin*, in a Moon's ſhort Year
" Acquire complete Perfection: Now they ſmoke
" Tranſparent, ſparkling in each Drop; Delight

" Of curious Palate, by fair Virgins crav'd.
——————————" *Stirom*, firmeſt Fruit,
" Embottled, (long as *Priamean Troy*
" Withſtood the *Greeks*) endures, e'er juſtly mild.
" Soften'd by Age, in youthful Vigour gains;
" Fallacious Drink! ---- Ye honeſt Men beware,
" Nor truſt its Smoothneſs; the third circling Glaſs
" Suffices Virtue: But may Hypocrites
" Drink on unwarn'd, till, by inchanting Cups
" Infatuate, they their wily Thoughts diſcloſe,
" And, through Intemperance, grow a while ſincere.
——————————" The Muſes ſtill require
" Humid Regalement, nor will aught avail
" Imploring *Phœbus*, with unmoiſten'd Lips.

PHILIPS.

' Perhaps, the Bard was inſpired, and like the ' *Delphic* Maid, has intimidated ſome of our great ' Conſumers of the *French* Vintage with too ſtrong ' a Glare of Truth; perhaps they ſhun honeſt ' *Stirom*, for fear the generous Juice ſhould bring ' to Light the ungenerous Enemies of its Coun- ' try: Though perhaps thoſe Gentlemen, have ' left the rich Product of the Apple-Vintage to ' regale their good Friends the *Jews*; who perhaps, ' though forbidden the Uſe of Wine, would ſoon ' overcome the Qualm of Conſcience by eſteem- ' ing Cyder as no Wine; and therefore fit for the ' Conſumption of ſuch angelic Creatures.

' Really, the *French* cenſure us with the pretty ' Epithet of *Engliſh* Fools, for diſregarding our ' fine Race of Apples; and in ſome Remarks, ' which I have ſeen made by a very ingenious Gen- ' tleman, on his Travels thro' *Normandy*: He ob- ' ſerves, " that this Province was once, an Ap- " pendix to the Crown of *England*; and though " it wants Wine, it yields the King as much De- " meſnes as any of the reſt; the lower *Normandy*, " having Cyder for its common Drink: And he " viſibly obſerved, that the Inhabitants were more

" plump

" plump and replete in their Bodies, and of a clearer " Complexion than thoſe that drank altogether " Wine." This is a manifeſt Proof of the Salubrity ' of Cyder among the *French*, whom Nature ſeems ' in a peculiar manner to have adapted only for the ' Reliſh of the Grape. Then what Folly is it in ' *Britons* to deſpiſe their own Apple Plantations, ' merely from their great Fœcundity? Are we not ' worſe than the fooliſh Subjects of the *Mexican* ' *Ynca*, who deſpiſed Gold on account of its Plen- ' ty; and are we not ſhewing ourſelves greater ' Fools than the *Indians* inhabiting the Banks of ' the *Ganges*, when they are grieved at that In- ' undation of Waters which is principally conduc- ' cive to the Fertility of their Country? While ' we have ſuch excellent Cyder,

" What ſhou'd we wiſh for more? Or why, in queſt
" Of foreign Vintage, inſincere, and mix'd,
" Traverſe the extreameſt World? Why tempt the Rage
" Of the rough Ocean? when our native Glebe
" Imparts, from bounteous Womb, annual Recruits
" Of Wine delectable, that far ſurmounts
" *Gallic*, or *Latin* Grapes; or thoſe that ſee
" The ſetting Sun near *Calpe*'s tow'ring Height;
" Nor let the *Rhodian*, nor the *Leſbian* Vines,
" Vaunt their rich Muſt: Nor let *Tokay* contend
" For Sov'reignty; *Phanæus* ſelf muſt bow
" To th'*Ariconian* Vales." PHILIPS.

But the ſtrrong, rough, vinous taſted Cyder, is now the reigning one, and will probably hold the Preference; for this kind of Cyder, has a great Advantage of all others; it keeps well and improves by Age; it is wholeſome as well as pleaſant; and has Strength and Spirits to ſupply the place of other vinous Liquors. In its higheſt Degree of Perfection, this Cyder is not inferior to the Juice of the Grape, and ſeems to be beſtowed by Nature

upon theſe northern Countries as a full Equivalent.

But this is too little regarded, chiefly, becauſe the right ſtrong Sort of Cyder is not yet become a Drink common enough to rival foreign Wines; for, was a Cyder made from thoſe Apples that are known to produce the moſt generous Liquor, and that Cyder ſo plenty as to be ſold in publick Houſes for three Pence a full Quart as their Butt-Beer is; it then would be drank in common, and vaſtly leſſen the Importation and Conſumption of foreign Wines. And I think it is high Time this ſhould be brought to paſs, and People's Fancies turned from drinking them into a Reliſh for the moſt pleaſant, and healthfulleſt Liquor in the World; ſince there are ſuch Numbers of ſophiſticated Ingredients mix'd with, and ſo many evil Accidents reſulting from tipling foreign Wines, as, one would think, are enough to make us give the Preference to an excellent Apple-Wine of our own Growth.

I ſhall in the firſt place treat of Orchards, and of planting and cultivating Apple-Trees according to the beſt Methods known, to which I ſhall add ſome Hints for further Improvements; and in the ſecond Part of this Treatiſe, I ſhall give the moſt approved Receipts for making *Cyder*, *Perry*, *&c.*

THE

THE COMPLETE

Planter and Cyderiſt.

PART I.

How Thouſands of Acres of barren and other Lands may be improved and rendered very profitable, by planting them with Apple and Pear-trees for Cyder and Perry.

THE great Improvements of Land that have been lately made in *Devonſhire*, *Cornwal*, *Herefordſhire*, *Glouceſterſhire*, *Worceſterſhire*, and *Kent*, by planting Orchards and other Plots of Ground with Apple and Pear-trees; has plainly proved that nothing is more profitable (eſpecially where there are poor Lands that produce no Corn, *&c.*) than when they are put to this excellent Uſe; for there is hardly any ſort of Land but what may be made to bear Fruit-trees, if managed according to Art.

If the Land be barren by inundations of Waters, it may cheaply be drained and preſerved dry by the new-invented Drain-plow, that cuts and throws out Pieces of Earth ten Inches ſquare as it is drawn along, and does more of this Work in one Day

than fifty Labourers can; an Improvement unknown to all Authors that ever wrote on Huſbandry. Or it may be done by cutting ſubterraneous Drains with hand Inſtruments, according to the preſent Practice for draining Fens, Marſhes, or other wet Lands, at a ſmall Expence; by which means, if the Drains be filled up with Thorn-buſhes, Stones, or Straw, and covered with Mould, it will appear like all ſolid Ground, on which an Orchard may be planted to much profit.

So likewiſe may barren dry Land be improved, that bears nothing elſe but Furze, Ling, Heath, or other unprofitable Vegetables, by the *Hereford-ſhire* Furze-plow and Horſe-break; in ſuch a manner, that Fruit-trees and Corn may be planted on the ſame in two Years Time, free and clear of any Damage from the Growth of the Furze, *&c.*

Or if the Land be ſo naturally poor and barren of itſelf, as to bear nothing but a little inſignificant Graſs or Weed; if it is not a very light, deep, ſandy Ground indeed, it may, by the Aſſiſtance of a proper Compoſt, be fitted for planting Cyder-apple, or Perry Pear-trees.

But though I have here only ſhewn how barren Lands may be planted with theſe Fruit-trees to much Profit, I ſhall alſo ſhew how the more fertile Sorts of Land may be likewiſe planted to a great Improvement.

Firſt, There are Thouſands of Acres of Meadow-lands that may be planted with Cyder-apple or Perry Pear-trees, yet which may be ſaid to leſſen their Crops of Graſs very little, if at all. It will rather in ſome very dry Summers increaſe them by the Shade of the Trees, and yet yield a ſweet Sort; provided the Trees are not planted too near each other: This was evidently ſeen in the long dry Summer, 1753; When mine and many other Meadows planted with Fruit-trees, yielded much more Graſs and Hay,

Hay, than thoſe open Meadows that had no Trees to ſhelter them.

Arable Lands may be alſo planted with Cyder-apple or Perry Pear-trees to great Profit, provided the Trees be not planted at leſs than Thirty or more Feet aſunder every way, ſo that the Plow and Harrow may freely work between them for preparing the interval Ground to be ſown with Corn, Turnips, or other valuable Vegetables; this is done in many Orchards and produces a double Advantage by them, from the Fruit and Wood of the Trees: For 1ſt, the Trees thus planted will proſper with the moſt expeditious Growth, their Roots imbibing their Nouriſhment from the porous tillaged and manured Earth. 2dly, The Foliage of theſe Trees will be apt to engage the Flies and other Inſects to harbour in them, and ſo deliver the Corn, the young Turnips, Rapes, or other Sorts from their Rapine. 3dly, By the Shelter of ſuch Trees, the Corn will be preſerved very much from the Power of freſh and cold Winds, kept moiſt in dry Seaſons, and flouriſh when the Corn, Turnips, *&c.* in large open Fields are withered, and perhaps ſpoiled by the free Heat of the Sun, and long Drought of the Seaſon.

The Graſs * *Baulks* likewiſe of plowed Fields, may be planted with theſe Cyder-apple or Perry Pear-trees, to anſwer much to the Landlord's and the Tenant's Intereſt. I mean, thoſe Graſs Lands or *Baulks* that lie between the Hedges and the plowed Ground of incloſed Fields, as is common in *Hertfordſhire*, containing forty-eight Feet in Breadth; in the Middle of which, a Row of theſe Trees may be planted at twenty or thirty Feet aſunder, and be much improved by the grazing of Horſes,

* *Baulks* are narrow Slips of Land left for Graſs in Cornfields near the Hedges, which are uſually mowed.

Cows and Sheep, eſpecially by the latter; for when Turnip Crops are eaten off by them, the Sheep generally lie all Night on theſe Graſs *Baulks* and leave much of their Dung and Urine behind them, to the expeditious Furtherance and Growth of the Graſs and Trees. The Reaſon why we leave theſe Graſs *Baulks* is, becauſe the Plow-Horſes turn about on them at each end of the plowed Lands without damaging them; and becauſe we think it beſt to have ſome Corn and ſome Graſs.

The laſt ſort of Ground I have to recommend for planting Cyder-apple and Perry Pear-trees, is in Woods and Hedges, in Foreſts and Chaſes, where ſuch auſtere Fruit will be pretty ſafe from being ſtolen as they are hardly eatable; and where if they be not planted too near one another, or other Trees, they will thrive and bear abundance of Fruit.

Now as to the Charges and Expences of ſuch Plantations, they are very ſmall, compared to other Parts of Huſbandry; there being little more required than gathering the Fruit, and making it into Cyder or Perry, after waiting, a few Years during their Growth, which is very inconſiderable, conſidering the great Profit and Advantage that accrues to the Owner afterwards. Mr. *Hartlib*, who wrote many Years ſince on Huſbandry, mentioning the Benefit of Standard Fruit-trees ſays; 'that they 'afford curious Walks, Food for Cattle, Fuel for 'Fire, Shade from Heat, Phyſic for the Sick, Re-'freſhment to the Mind, plenty of Food for Man, 'and that not of the worſt, and Drink alſo of the 'beſt; and all this without much Labour, Care, 'and Coſt.'

And that Fruit-Trees are thus an Improvement to Land in the Opinion not only of ancient Writers, who have compoſed many Volumes to encourage this Work; giving it the greateſt Encomiums, and prefering

prefering it before moſt other Employments; but alſo of the Moderns, *viz.* Mr. *Blythe Auſten*, Mr. *Mortimer*, Mr. *Worlige*, Sir *Jonas More*, and others who have wrote on this Subject of late Years. They tell us that beſides the Advantage that accrues to the private Owner, it would be of Benefit to the Public to have Cyder-apple and Perry Pear-trees much more propagated than they are; in that it would hinder the vaſt Conſumption of foreign Wines, which is the enriching of Foreigners by a Trade very prejudicial to this Nation; and inſtead of it, might procure to us a conſiderable foreign Trade of no leſs Advantage than the other has been prejudicial.

And I may add, that by increaſing ſuch Plantations of thoſe Fruit-trees the Price of Cyder and Perry may become ſo low, and the Pleaſure of drinking ſuch palatable Liquors recommend it to the common People ſo much, that it would induce them to drink leſs Gin and other ſpirituous Liquors, to the preventing of infinite Damage that frequently happens to Thouſands, who deſtroy themſelves by their burning intoxicating Qualities.

When beſt to plant Trees, &c.

IN wet Soils it is beſt to defer planting Trees till *February*; but lay not Manure at bottom, becauſe its Salt waſhing down ſtarves the Roots. If the Soil happens to be too lean and unſubſtantial, its Production will be weak and languiſhing; and their Indiſpoſition perhaps never can be remedied. A Soil wherein a young Tree is to be tranſplanted ſhould be richer than that from whence it is taken, becauſe it will prevent its Degeneracy and improve its Growth. But in dry Soils, *October* is the beſt Month to plant in, becauſe in ſuch an Earth, the young tranſplanted Tree will get into a little

Growth in its Roots, which will ſupport and maintain it againſt the Severity of Winter-weather; and be a Year forwarder in its Growth than if planted in the Spring-time. The Method of planting Standard Fruit-trees I ſhall ſhew by and by, as practiſed in *Devonſhire*, and *Herefordſhire*.

Sir Jonas More's *Scheme, ſhewing how Land may be improved in a very high Degree at an inconſiderable Expence, by planting it with Cyder-apple and Currant-trees, Gooſberry-buſhes*, &c.

THIS, he ſays, he will demonſtrate from that which every Country can eaſily do, and which even the moſt barren Lands are in a great meaſure capable of; and that is, the Improvement of it by planting of Fruit-trees for making Cyder, Perry, *&c.* And certainly (as he further adds) if the greateſt Improvement of Land in *France* be by their planting Vineyards, (by which ſo great a Revenue ariſes to the *French* King) it muſt be an equally conſiderable Improvement that muſt be made by the planting of Fruit-trees; eſpecially if of the Fruit thereby produced, may be made as generous a Liquor as any that the Grape produces in *France*.

This great Improvement of Land by planting it with Fruit-trees is thus demonſtrated.

Firſt, Eight-ſcore Trees, *viz. Red-ſtreaks* and *Golden-pippins* may conveniently be planted upon one Acre of Land; every Tree ſtanding ſixteen Foot diſtant from each other.

Secondly, He ſays, ſuch Trees cannot be ſuppoſed to bear leſs than one Buſhel on each Tree, one with another, which will make eight-ſcore Buſhels; and it is well known that twenty Buſhels of Apples will make

make one Hogſhead of Cyder: ſo that each Acre will produce eight Hogſheads.

But in caſe the Cyder be ſold at Four-pence per Quart as moſt certainly it may, ſince the Cyder-royal will be as good as Wine ſold at a Shilling per Quart; then the Product of Acre thus planted, will be worth thirty-two Pounds.

You have, beſides, the Profit of the Graſs or Corn growing the ſame Year, on the ſame Acre of Land; for if you plant (ſays he) Trees at the diſtance of twenty Foot one way, and but Twelve the other, (which is all one with ſixteen Foot before-mentioned) you may very well plow between them.

But further, if Gooſberry-buſhes and Currant-trees be planted among the Apple-trees, (as very well they may, and that will prove the much better Huſbandry) then there may be more than four Hogſheads of Wine-royal made in a Year of them, and much better than the other; ſo that at the ſame Price, *viz.* Two-pence per Quart, there will be eight Pounds more raiſed, that is ſixteen Pounds *per Annum*, from the ſame Acre of Gronnd.

But ſince it is uſual for Apple-trees to bear ſome four Buſhels, ſome five, ſix, ſeven and upwards, to twenty Buſhels; 'tis very probable that one Tree with another may bear four Buſhels; whence may be produced ſixteen Hogſheads of Cyder-royal, which at Three-pence per Quart (that is three Pounds the Hogſhead) comes to forty-eight Pounds. Nor is it unreaſonable to believe that the Product of Gooſberries and Currants, may amount to much more than the eight Pounds *per Annum*, at which we have computed it. For, (ſays he) I know by Reaſon and Experience, that Currant-trees and Gooſberry-buſhes, one with another, well huſbanded, may yield one Gallon a-piece: And upon one Rood of Land may be planted ſixteen Trees each four Foot aſunder, (which is a com-

competent Diſtance) ſo that one Rood may produce two Buſhels of Currants and Gooſberries; and conſequently, there being eight-ſcore Roods in an Acre, there may be ſixteen-ſcore Buſhels grow thereon. Now 320 Buſhels yielding 16 Hogſheads of ſimple Wine, will make 8 Hogſheads of Wine-royal; which at Three-pence per Quart amounts to twenty-four Pounds; this being added to the forty-eight Pounds made by Cyder (according to the laſt Computation,) makes ſeventy-two Pounds *per Annum* at Three-pence per Quart: But if it be ſold at Six-pence per Quart, the total Product from one Acre of Ground (now not worth above twenty Shillings *per Annnm*) will amount to double the afore-ſaid Value; that is to ſay, to 144 *l. per Annum.*

Nor do I know (continues he) why any ſhould contemn or deny this, as an extravagant Calculation: however, a thing impoſſible it cannot be for theſe two Reaſons. Firſt, That one Apple-tree may bear thirty Buſhels at a Time; and one Currant-tree ſix Gallons, and one Gooſberry-buſh four Gallons; whereas here I reckon but four Buſhels inſtead of thirty, and but one Gallon inſtead of four or ſix. As for ſelling it at Six-pence per Quart, this I am ſure of; that the Cyder and Wines, made as I ſhall ſhew by-and-by, are as good, and as well worth Eighteen-pence per Quart, as the Wines generally ſold at Taverns. Secondly, that this Cyder-royal, being as good as Wine at Eighteen-pence per Quart; why ſhould the Price fail of Eighteen-pence per Quart, until, by a very conſiderable Increaſe of Plantations, it becomes cheaper through the greatneſs of the Quantity made.

Of planting an Orchard, according to Mr. Miller.

HE ſays, that an Orchard ſhould be expoſed to the South-eaſt, but not on the Side of a Hill; becauſe the Goodneſs of the Ground is waſhed away by the Rains, and the Trees are ſtarved; and if defended from the North-eaſt and Weſt-winds, it will be the better. A free Sun and Air, dries up Damps, diſſipates Fogs, and prevents Blights. Large Timber-trees planted on the Side of an Orchard to break off pernicious Winds will be of great Service: Or if this is done by a Ridge of Hills it is better, and the Fruit better taſted; for Fruit imbibes the rank Vapours proceeding from the Earth, and by the too cloſe planting Trees. Upon this Account a Gentleman (ſays he) planted his Rows of Fruit-trees at eighty Foot diſtance, and the Trees from one another at ſixty Foot diſtance; the Ground between may be plowed and ſown with Wheat or other Grain as if the Ground was clear of Trees, and produces as good as any other Crop, except juſt under the Trees. And by thus plowing and dreſſing, the Trees are rendered more vigorous and healthy, ſcarcely having any Moſs or Marks of Poverty; will abide longer, and produce better Fruit. If the Ground be dry, plant your Orchard in *October*; If moiſt, in the beginning of *March*. In the Spring following plant Turf about the Roots, the Graſs-ſide downwards, to prevent the Sun and Wind from drying the Ground, and thus the Expence of watering will be ſaved; and after the firſt Year, the Trees will be out of Danger if they have taken root well. When you plow the Ground between the Tees, plow not too deep leſt you hurt their Roots, and plow not too near the Trees, nor let Weeds grow about them; but after the Turf is rotted, dig it in. Every third Year you muſt dreſs the Ground. Thus Planters will be inclined

inclined the more to dreſs their Orchards, (as they expect a Crop of Corn and another of Fruit;) remembring always, that old tranſplanted Trees never produce ſo much Fruit as the younger Sort. Theſe Trees will want no other pruning than cutting out dead Branches and croſs Boughs; for too often pruning theſe Standard Orchard-trees does harm. Trees planted at a diſtance, will produce twice the Fruit as cloſe planted ones will. Trees planted too cloſe cauſes Vapours to collect the Heat of the Sun, which reflects its Beams, ſo as to cauſe what they call a Fire-blaſt, which is moſt hurtful to the Fruit; and this is moſt frequent where Orchards are planted too cloſe with Trees, and ſtand expoſed to the ſouth Sun. He alſo ſays there may be a large Avenue of Apple-trees extended croſs a neighbouring Field, which will render it pleaſant, and produce a great Quantity of Fruit; or there may be ſome ſingle Rows of Trees planted to ſurround Fields, *&c.* which fully anſwers the ſame Purpoſe, and is leſs liable to Fire-blaſts. Thus when once a Standard Fruit-tree is planted in ſecurity, it is enough; it will produce excellent Fruit without Culture: The Sun and Air will do the reſt. To this I ſhall give an Anſwer, and prove, that Part of what he has advanced is wrong.

How to order an Orchard that it ſhall never miſs bearing.

A Certain Perſon writes, that he has ſeen ſeveral Orchards that have been blown as white as a Sheet, but when the Bloſſoms have been gone, there hath been no appearance of Fruit; therefore (ſays he) follow theſe Directions, and your Trees ſhall not fail to be extraordinary well hung; for I can aſſure you of my own Knowledge, and the Experience of ſeveral others, that when moſt Orchards have miſcarried, the Trees could not ſtand under

under their Burden, in an Orchard managed in the following Manner. If you live near any healthy Ground, then in Summer dry three or four hundreds of Turf: But if you are not near any healthy Ground, then take three or four good Truſſes of Straw, Fern, or ſuch-like, not too wet nor too dry; and reſerve them for uſe. When you perceive there is an Eaſterly-wind, or a North-eaſterly red Wind, which was ever accounted a Blighting-wind; obſerve that Side of the Orchard the Wind blows on and lay a good armfull of it in three or four Places according to the bigneſs of your Orchard, and light them with ſome dry Sticks; then add more of ſuch Fuel for making a Smoak and Smother, and the Wind will drive the Smoak through the whole Orchard. Continue this till the Wind ſhifts from the eaſterly Quarter, and it will preſerve the Trees and Fruit from Blights, and all manner of Flies and Catterpillars which thoſe ſort of blighting Winds uſually bring along with them. When you find the Wind changed to Weſt, North-weſt, South, or South-weſt; you may forbear making any ſmoke, for thoſe Winds never hurt. Thus, if Straw, Furz, or Fern, is burnt under Trees in a dangerous blighting Seaſon, it will prevent the Damage cauſed by the Froſt, and kill Inſects; eſpecially if ſome Brimſtone is thrown into the Fire while it is burning under the Tree. This Method I dare anſwer for it, is much more efficacious, than only to burn Straw or Furz without Brimſtone; for it is well known, nothing is more deſtructive to Inſects than the ſmoak of Sulphur. By obſerving this Practice, you ſhall find, your Orchard will not miſcarry once in ten Years; but on the contrary, your Trees will be furniſhed with the beſt of Fruit, when moſt other Orchards fail.

How one of the pooreſt Orchards, was made one of the richeſt at a ſmall Expence.

A Farmer that held a ſmall Farm, near *Reading* in *Berkſhire*, by a Leaſe of five Years; for the firſt two Years, received no Benefit worth mentioning from his Orchard. I, riding that Way with a Friend, who was his Acquaintance, called in to ſee the Farmer; and having refreſhed ourſelves, we walked about to view his Ground which was very poor. At laſt, going into his Orchard, the poor Farmer fetch'd a Sigh: Oh (ſays he) 'would all theſe Trees were chopp'd off to the Roots! 'Tis true, this Orchard is ſpecial good Ground, but I have no Benefit from it. If I ſow it, (continues he) the ſhade of the Trees or the Birds deſtroy all my Corn, and I have not had twenty Buſhels of Apples theſe two Years from it, tho' I ſtockt it for the Benefit of the Orchard, which is between three or four Acres of Ground. Countryman, (ſays I) you know not what Riches this Orchard may produce: I will inform you of a Method, to make it pay your Rent, if you'll give me but one Hogſhead of Cyder. I then perſuaded him to take a Leaſe of twenty-one Years; for I told him, he had the beſt Pennyworth in the County. His Anſwer was: I wiſh I was well rid of it. If you'll obſerve my Directions, (replied I) you need not fear, but your Orchard will pay the Rent. How can that be, (ſays he) when I neither ſell Ale or Beer? I deſired him immediately to get me two or three Labourers, and I would direct them. I brought the Water from the High-way, by making a Dam into the middle of the Orchard; from which I ordered them to cut ſeveral Rivulets, leading to every row of Trees, and made them dig a circular Trench of a Yard diameter round

round each Tree, that the Water might have time to ſoak into the Ground. Notwithſtanding all this; he had not the Courage to take a new Leaſe, but firſt deſigned to ſee the Effects of my new Invention. This was about the middle of *February*. I ordered him alſo to ſmoke his Orchard with Straw, or Fern, and continue it ſo long as the Wind ſhould continue eaſterly or northerly. About the latter end of *September*, I called on the Farmer to know how his Orchard thrived: With a chearful Look he replied; I have Apples enough to pay my Rent; and punctually performed more than his Promiſe. I adviſed him again to take a new Leaſe, but he told me it was too late; that his Landlord had been there and ſeen the Improvement; and would not let him have a Leaſe under thirty Pounds a Year: For he was of Opinion, this new Method would not fail in cauſing the Orchard to bear extremely well for the future. The Leaſe being expired; the Landlord keeps the Orchard in his own Hands, and lets the reſt of the Ground for fifteen Pounds a Year. The Orchard brings him in at leaſt, twenty Pounds a Year more, which is nearly double the old Rent. That Year when the Improvement was made, he had about ſixty Quarters of Apples, the beſt part of which he ſold at a good Price, and with the reſt he fatten'd his Hogs.

The Profit and Pleaſure of planting Apple and Pear-Trees in plow'd Ground: How to ſecure them from Damage, and the Method of ſowing Grain between them, by the excellent four-wheel Drill-plow; and of Howing the interval Land, by a two-wheel Horſe-break.

IT would be of ſome Advantage to an Orchard, if its Situation be a riſing Ground, with a South-eaſt Aſpect; but when I ſay a riſing, I don't mean that a Plantation ſhould be made on the Side of a Hill, where the Rains can't lodge, but on an eaſy Declivity; for here, the Sun and Air will have a great Influence, as being thus a better Situation than when the Trees are planted on even Grounds, becauſe the Fogs are here quickly diſperſed and the Damps ſoon dried up; which too often is the Caſe when Trees are planted on a Level and expoſed to the North. Plant your Standard-trees not too cloſe, for if they are, they will be frequently Blighted, becauſe it is too much confined for the Air to blow away deſtructive Fogs, and noxious Vapours, which are hurtful to Trees. But in Caſe a Perſon is neceſſitated to plant on a Hill; then a Row of Elms, Beech, or other Trees or Hedges, ſhould be planted round ſuch an Orchard, to defend the Fruit-trees againſt the pernicious Effects of high Winds. This leads me to make Obſervations on the Practice of the *Kentiſh* Farmers, who are Patterns for planting Orchards of Cherries and Apples, and ſetting them in rows; ſo that the Plow can work between them more than one way, for ſowing the interval Ground with Corn, *&c.* by which means the Trees are kept in a moſt thriving Condition, free of Moſs and Weeds, as they grow in a tillaged well manured Earth. Thus the Land

being kept light and hollow by the Plow, the fine capiliary Roots of the Trees meet with ſuch an eaſy Entrance into ſuch porous Earth, as cauſes them to run into a moſt expeditious Growth, and bear a larger and better taſted Fruit, than thoſe Trees bear which grow too cloſe to one another. But in plowing ſuch an Orchard, great Care ſhould be taken not to plow too deep nor too near the Trunks of the Trees, leaſt the Plow and Harrows hurt the Roots or Bark, which commonly cauſes Cankers, and Damages the Trees; nor ſhould Corn or Weeds grow too near them, leaſt they draw ſo much Nouriſhment from the Earth as to impoveriſh the Earth about the Roots. Trees thus planted at 30 or more Feet diſtant from each other, may very likely produce almoſt double the Quantity of Fruit, and much better taſted than what grows on Trees tranſplanted too near one another. The Ground being prepared by the Plow or Spade, the young Trees to be tranſplanted, ſhould be very carefully dug out, and not pulled up, leſt their Roots be damaged by ſtraining, bruiſing, *&c.* then prune the Roots and the Heads of the Trees; the Roots by cutting off the too long Fibres, or the bruiſed or broken Parts, if any, ſuch as are grown acroſs one another, and all top Roots, ſo as to bring them into a ſpreading Poſture. As to the pruning of the Heads, it ought to be done in proportion to their Roots; that is to ſay, when there are too many Branches, croſs ones eſpecially, they ſhould be cut off; for theſe by the Force of Wind are apt to bruiſe and damage each other; and in doing this the Head ſhould be regular and handſome, and fit for Fruit-bearing. But the Roots of Trees require the greateſt Skill and Care to manage to the moſt Advantage, becauſe, as all Roots are furniſhed with Veſſels or Veins, that

imbibe and receive the moiſture of the Earth; they in courſe with it imbibe, Oil, Salt, Air, *&c.* Hence it is ſuppoſed that the Juices in Vegetables reſemble the Blood in Animals. The Fruit-tree being ready to be tranſplanted, if the Roots are got dry, ſoak them firſt in mudgel-hole Water or any other, five, ſix, or ſeven Hours, and then proceed to planting it. If the Ground be a Clay, or other wet Land, plant it very ſhallow, the ſame if it be Rocky or Gravelly: But obſerve, that in ſuch a ſhallow Soil, the Tree muſt be ſupported two Ways, *viz.* by raiſing a Hill of Earth about it ſix Inches, a Foot, or more high, and alſo by Stakes. Now to plant a Fruit-tree to the beſt Advantage, make the Ground perfectly fine where the Tree is to ſtand, and let it be (Apple-tree eſpecially) about four Years old; for ſuch a young Tree will ſoon overtake a much older one. Have a Care alſo, not to take a Tree out of a rich Earth, to plant it in a poor, nor out of a wet to plant it in a dry Soil. In a dry Earth, plant in *October*; in a wet, in *February*. The Ground being chopped fine with a Spade, never plant a young Tree above a Foot deep; and if it be a Clay, Gravel, or Rock, hardly half ſo deep. Being thus ſet in fine made Virgin Mould, ſtrew ſome of the looſe Earth over all its Roots, ſhaking the Tree a little, that the Mould may the better get between the fibrous and fineſt Parts of the Root; and when the Roots are fully covered by ſuch Mould, ſtamp on it, to make it lie the cloſer to them: then water them a little, but not too much, leſt it rot the Roots; for many young Trees are ſpoiled by too much watering both at and after planting. After this lay Turf to cover the Mould, further than the Roots extend, with the Graſs-ſide downwards, for preventing the Damage cauſed by Drought, and cauſing waterings to ſoak in gradually

dually. Then in a Year or two afterwards, when this Turf is thoroughly rotten, dig it with a Spade, without hurting any of the Roots, in order to keep the Earth in a tilth Condition; and by laying a proper Manure over the ſame once in three or four Years, ſuch a Fruit-tree will grow more in one Year, than a neglected one will in three or four. The next thing is to ſecure ſuch a new-planted Standard Fruit-tree, from the damage of Winds and Cattle; for which ſome make uſe of two Stakes, others of three, others of a ſquare Paling carried up ſo high, that Cattle can't reach to crop the Branches of the young Trees.

By a perſon's being poſſeſſed of ſuch an Orchard and enjoying the Advantage of Wood, Fruit, and Grain, growing in a tilled well manured Ground, it is not only the moſt profitable, but alſo the moſt delightful Orchard of all others; provided the Grain be Wheat, Barley, Peaſe, or Vetches, ſown out of the light, plain, four wheel Drill-plow, that carries a buſhel Hopper, and a peck Hopper on it. The firſt for ſowing a powder'd Manure on the ſeed as ſoon as it drops out of the peck Hopper; by which Method the Trees and Grain are deliver'd from the common deſtructive Poverty of Land, as this way gives a conſtant ſupply of Manure at their Roots. Secondly, by leaving a Foot or more interval of Ground, always unſown between each Drill for the better Nouriſhment of the Grain, for giving the Sun and Air the more Room to diſpenſe their beneficent Influencies, and for allowing the uſe of another moſt neceſſary Inſtrument. This is the two wheel Horſe-hook, which by one Horſe's Draught, clears the ground of Weeds, and at the ſame time lays ſome of the interval Earth thus looſened on each ſide of the drilled Corn. I ſay this Orchard is more than ordinary delightful, becauſe a perſon

here may have the pleaſure of a charming Walk between the Drills of the growing Corn, even till it is fit to be cut down. Here he may behold a Profuſion of Profit and Pleaſure exhibited to his Sight, by the daily Growth of the Trees, Fruit and Corn. Here he may enjoy the frequent Odours of their Bloſſoms and Perſpirations. And, in my humble Opinion, thoſe who have ſuch an Orchard and a fine Garden near it, may be ſaid to have the moſt delightful ſpot on the Earth. For here may be ſeen the wonderful Works of the Almighty, Creator and Preſerver of Heaven and Earth; who always makes it his Delight to endow Men with Knowledge and Ability for improving Nature with Art; and thereby inciting them to make grateful Returns of Obedience to his bleſſed Commands, and to render the Tribute of Thanks and Praiſes to his glorious Majeſty, whoſe Centre is every where, and his Circumference no where, for the conſtant Supplies of his good Creatures to the Nouriſhment of our Bodies and Delight of our Souls. And it was the Conſideration of this ſort of Delight, that made the Rev. Mr. *Laurence* in his Book of Gardening, break out into this Extaſy of Expreſſion. I little doubt (ſays he) " that if Angels were confined " to the lower Regions, they would ſeek the Re- " tirement and Pleaſure of a Garden as moſt " agreeable to their heavenly Diſpoſitions." But when Men ſlight theſe excellent Bleſſings and become ungratefully wicked; they may juſtly apply to themſelves what another Reverend Divine has written to this Purpoſe in the following Words.— " when you plant ſay this: I plant this Tree " here, in hopes that 'ere long it may prove " a good one: But if it ſhould prove other- " wiſe, I ſhould repent of the Pains I beſtow up- " on it. I ſhould think it unworthy the Ground " it ſtands on, nor would I ſuffer it to ſtand long.

" long. Now can I pronounce theſe Things con-
" cerning this Tree? What then do I think God
" pronounced concerning me when he made me?
" Surely he deſigned I ſhould anſwer the end of
" my Creation in doing my Duty to him, my
" Neighbour, and myſelf. He gave me not my
" Being, nor did he endow my Soul and Body
" with ſuch excellent Powers as he hath, for me
" to do no Good in the World; much leſs for
" me to do Miſchief. What then can I expect
" from him, if I fail of theſe Ends, but the ſame
" Meaſure I threaten this Tree with, if it proves
" unfruitful; Even to be rooted out and utterly
" deſtroyed."

How to forward the Growth of Fruit-trees with the greateſt Expedition, cauſe their Bloſſoms to knit, and their Fruit to ſtand.

THIS excellent Piece of Huſbandry is beſt performed in the Spring Seaſon, and beſt of all at the Beginning of the Trees Bloſſoming: Then take your ſhort, rotten Horſe-dung, or any other Dung, and ſpread it ſix Inches at leaſt in Thickneſs juſt over the Roots of either Standard or Wall Fruit-trees, and as wide as you think fit, without digging or any ways breaking the Surface of the Earth. In this Poſture, the Dung lies in a right Condition to receive Todge and to have its Saline and Sulphureous Quality waſhed into the Roots of the Trees by Rains; which will ſurely force on a ſwift Growth of the Trees, and Fruit, eſpecially if this Sort of Application be made uſe of every Second Year. Thus the Bloſſoms and the Fruit will be enabled to withſtand in a great Degree the Force of Wind and Weather; and the Roots defended from the Damage cauſed by long Drought. This Improvement may alſo be further in-

increaſed, if Pigeons, Rabbits, or Hen-dung is thinly laid over the Stable rotten Dung. And for preventing the harbouring and breeding Worms, Piſmires, or other Ground Inſects in the Dung, which generally happens to be the Caſe, ſcatter over it ſome Soot mixt with Aſhes, which will likewiſe ſtill further aſſiſt the Growth of the Trees, and Fruit. If your Standard Fruit-tree is a young one, you may employ four or more Furzen Faggots to forward its Growth, by laying two at at the Root, and others on the Top, which being bound to their Place will, throughout the Summer keep the Roots moiſt and cool, and in the moſt growing condition, for Shade and Moiſture very much tend to the Tree's thriving. It is alſo to be obſerved on this Account, that ſuch an Application of Dung ought not to be put on before the Spring, leaſt it ſhould force the Bloom out too ſoon to its Damage; nor ſhould ſuch a dungy Dreſſing be laid too near the Roots of Gummy Fruit-trees, becauſe dung, does not agree with theſe as with the Apple and Pear-tree Nor ſhould the ſame Dung-dreſſing be the ſame the ſecond Year as it was the firſt; becauſe the Ground as well as the Trees, and Roots, agrees beſt with variety of Dreſſings, as is fully evident from any plow'd Ground, and the Corn that grows in it. For a Farmer may dreſs his Land with only one Sort of Dung or Manure till it produces hardly any Corn at all. Therefore at one Time Dung, at another Time Aſhes mixt with Soot, another Time Horſe-litter, or Fern, are very proper Dreſſings for Fruit-trees, to be laid as I ſaid over their Roots: for if Dung eſpecially was dug in as a Dreſſing to them, the Conſequence would be, a Canker in the Roots and the Deſtruction of the Fruit-trees.

Several

Several other Ways to forward the Growth of Fruit-trees with much Expedition, and cauſe the Bloſſoms to knit, the Fruit to grow larger and ſtick faſt on the Trees.

The Firſt Way,

HAS been by means of a Sheep-fold, made with moveable Hurdles, which incloſes or pens in the Sheep about the Trunks of the Trees, after they have been firſt bound about with Hay or Straw to prevent the Sheep from rubbing againſt them. This Method of Folding muſt be repeated for two or three Nights ſucceſſively, and then Sheep's Dung and Stale, has had the deſired Effect. A Fruit-tree that was thus managed had not bore any Fruit to Perfection for ſeveral Years before, but after this produced abundance of Fruit.

Another Way,

HAS been practiſed by making Holes down to the Roots of Fruit-trees with an Iron Crow or Mattock, and placing the Hoofs of Cows, or Oxen, in theſe Holes to ſtand with their open Part to the Weather; and as the Rain from Time to Time falls in them, it putrifies and runs over, and ſoaks to the Tree's Roots, and thus greatly fertilizes the Tree.

A Third Way,

IS to water the Roots of the Trees now and then in the Summer-time, with ſome fertilizing Liquor; ſuch as black Mudgel-hole Water, or with a Liquor that has been prepared by paſſing through a proper Compoſt for this Purpoſe.

How

How the Sides of barren Hills and other barren Land may be made ſo fertile as to cauſe Apple and Pear-trees to grow to much Advantage.

THIS is an important Article to write on, even to ſhew how Fruit-trees may be made to thrive on the moſt barren Land. For there is hardly any Sort of Land but what may be made fit for the Growth of them by ſuch Artificial Helps as I have before given an Account of; Or by mixing of Sand with rotten Dung, Turf, and Coal-aſhes; or Street or Road Dirt, mixt with Pigeons, Hens, Sheep or Rabbet's Dung. All theſe or part of them may be made into a fertile Compoſt, and being ſtirred twice to make it ferment and putrify, it may be placed over the Roots of Fruit-trees from Time to Time; and as ſuch a Compoſt lies on the Surface Earth, it will keep it in ſuch a light ſpungy Condition as will make it freely imbibe the Rain-waters, and lodge them ſo as to keep the Tree in a continual thriving, and increaſe its Roots and Sap. Another Advantage attending the planting Apple and Pear-trees on the Sides of Hills, is, that if the Trees are diſpoſed in a regular way on a Deſcent, the Virtue of the Compoſt will be waſhed down to the Roots of the lower Trees, and ſo on from one Tree to another, till the whole Plantation becomes in a great Degree fertilized and improved by it. Others make uſe of Malt-Grains, and mix them with ſtiff Earth and Sand, by way of Compoſt for forwarding the Growth of Fruit-trees, which indeed is leſs liable to cauſe cankered Roots, than a Compoſt prepared with Horſe-dung.

How to recover and improve the famous Kentiſh *Pippin by double Grafting it.*

FOR this I am obliged to a *Kentiſh* Gentleman who informed me how this excellent Apple may be grafted ſo as to grow into as large and fair Fruit as in former Times. He obſerves, that by double Grafting, the Largeneſs and Fairneſs of this Fruit is improved without any Alteration in the Quality of it, though it be grafted on Trees of different Kinds; for the Nature of the Fruit is not at all altered by the Nature of the Stock on which it is grafted, contrary to the Opinion of moſt of the ingenious Writers on that Subject. He ſays that there are many Experiments to confirm this: But, adds he, I ſhall only produce one that has been obſerved in *Kent*, *viz.* that their *Pippins* which were formerly grafted on the Stock of a ſweet Apple called a *Founding*, are as ſharp in their Taſte, and have all the Qualities as the ſame Fruit grafted (as it has been of late Years) on the wild Crabſtocks. This valuable Fruit the *Kentiſh* Pippin, is almoſt loſt among us, occaſioned by the Decay of old Orchards, and the Nurſery Men not knowing properly how to raiſe them, having neglected propagating this Sort of Fruit on account of their cankering and dying ſoon after grafting. To remedy this Inconvenience and raiſe this Fruit in the ſame Perfection it was formerly; the Wild or Crab-ſtock ſhould be firſt grafted near the Ground with the Sweet-apple called the *Founding*, (or perhaps any other ſweet Apple may do) and when the Shoot from this Graft is grown big enough, it ſhould be grafted with the *Kentiſh* pippen about ſix Foot high. By this Method the Fruit may be raiſed with Succeſs; it appearing to be the ſame by which many, if not all the old

Pippin

Pippin Orchards in *Kent* were formerly raiſed. I have obſerved in ſeveral of thoſe old Orchards, that many of the Pippen-trees have put forth Shoots about five Foot high near the Place where they had been grafted, and thoſe Shoots (not being cut off in Pruning the Orchard) have grown large enough to bear Fruit, which has been conſtantly obſerved to be the Sort of ſweet Apple called in *Kent* the *Founding*. Hence it is plain, that *Pippens* were formerly raiſed by firſt grafting the Wild Stock with the *Founding*, and then grafting the *Pippin* on the *Founding*.

Of improving the Pear, the Apple, the Peach, the Nectarin, and the Plumb, &c. *by twice grafting and innoculating.*

THIS Method, (ſays the ſame ingenious Gentleman) of twice grafting or innoculating for the raiſing of *Kentiſh Pippins*, and meliorating of ſeveral other Fruits, I doubt not, may be applied to the Improvement of the *Peach*, *Nectarine*, *Plumb*, *&c.* as he has tried the experiment on a *Medlar*, which being grafted on a *Pear* that had been firſt grafted on a *Quince* Stock, did produce very fine Fruit. But whether this kind of Improvement may be carried further by twice grafting and innoculating, I know not; but think it worth the Trial of the Curious. The Practice (continues he) of raiſing from the Kernel inſtead of the Sucker, and of twice grafting or innoculating; I fear, is too ſlow a Proceeding for Nurſery-men to follow: But if they would keep ſome Trees raiſed by theſe Methods of the kinds before mentioned; and would likewiſe twice innoculate all *Peaches* and *Nectarins*, (or at leaſt all the delicate Kinds) no Perſon in the leaſt Curious or Conſiderate, but would give an extraordinary Price for Trees ſo raiſed. The Ex-

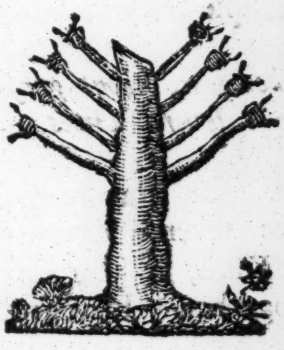
periment has been tried for ſeveral Years by a certain Gentleman who has found the beſt way of mellonating and improving any ſort of *Pear*; and that is to graft or innoculate it on a Tree that has been grafted before on a *Quince* Stock, by which means as aforeſaid, theFruit will grow much finer and larger. Beſides this Practice has another great Advantage, *viz.* That the Trees after double grafting, are remarkably more fruitful. The ſame may be obſerved with regard to Apple-trees.

What an old Author ſays, about grafting an old Stock ſeveral Times.

HE obſerves that you may graft one Tree on another ſeveral times over, and every Year a different Kind, if you keep to thoſe kinds that will grow together. Firſt graft a *Crab* near the Ground with ſome good Apple-graft, and the next Year graft that again, a Handful or two above the Place where the firſt was grafted; and the next Year graft that ſecond Graft, and ſo proceed for five or ſix Years, by ſetting Graft upon Graft. This (ſays he) probably may make ſome Alteration and Commixture in the Fruit of the topmoſt Graft: And though it be very true that every Graft keeps its own Nature, yet it receives ſome ſmall Alteration from the Stock. The Sap thus ariſing, may poſſibly raiſe a new kind of Fruit. The more red (ſays he) the Rhind of any Apple is, the better it is for Cyder; the paler, the worſe. No ſweet Apples that hath a rough Rhind are bad for Cyder, eſpecially if they are ſuffered tolie ſome time in heaps. Mixture of Fruits is of great Advantage to your Cyder: For the meaneſt Apples in a Mixture, make as good Cyder as the beſt alone, except the *Red-ſtreak*, and ſome few celebrated Apples for that purpoſe; but always obſerve, that the Apples ſo mixed be of equal ripeneſs.

They uſe the following Method in the Southams. *When an Apple-tree fails bearing, either by ſuperfluity of Branches, or declines by overbearing; or ſometimes, when a Perſon has a mind to alter the Fruit.*

THEY lop off the ends of the Branches, and graft it accordingly. See the Form.



Here are eight Limbs or Branches grafted, containing ſixteen Cyons, and ſo in like manner, more or leſs, as the Tree will beſt admit of; cutting them off pretty near to a Level, for the greater eaſe of doing it; and as it is more commodious on other Accounts.

In this manner I would adviſe to ſerve all Trees that are deſigned to be improved for this purpoſe; and that it may be done to the greateſt Perfection, the more Care ſhould be taken to produce a proper ſort of Fruit to graft with, otherwiſe much Diſappointment may enſue: But when this is rightly performed, the Grafts commonly begin to bear the ſecond or third Year. Now the right Sorts to graft with for Cyder, are either a bitter-ſour, or a rough-bitter Apple. If any ſweet-bitter be already grafted, they may be continued, eſpecially with the rough-bitter ſort; becauſe all ſuch bitters tend greatly

to

to the Strength and Support of that excellent Liquor; and this is one main Reaſon why the *Southam*-Cyder is ſo naturally good. This I adviſe you to obſerve doing, whether it be to improve young or old Trees by grafting, which is, to introduce the rougheſt ſort of Fruit, eſpecially thoſe that are moſt bitter, and leave out the beſt ſorts of Table-fruit.

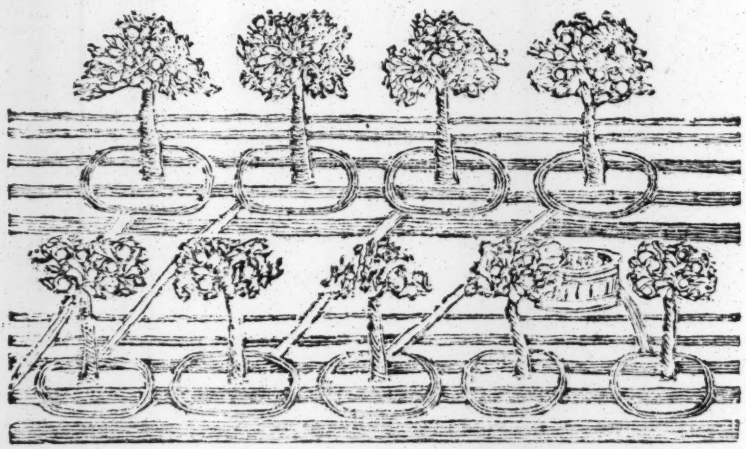
How to ſend Trees, ſo as to receive no Damage by long Carriage.

IT is a common Practice in *France*, when Fruit-trees are taken up for long Carriage, to wrap Moſs about their Roots, as the beſt Security hitherto known, to preſerve them from withering and decaying.

A new Method, ſhewing how to convert the barren Sides of Hills into profitable Orchards, at a ſmall Expence.

NOtwithſtanding what Mr. *Miller* ſays (at Page 15) *viz.* that Hills are improper Situations to plant Standard Fruit-trees on, becauſe the Ground is waſhed away by Rains, and the Trees are ſtarv'd, I'll make it appear, that his Notion is wrong. It is certain, he has wrote the beſt Book extant on Gardening; yet as he, nor hardly any other Author, can be ſaid to be thoroughly perfect in all their Writings; ſo in this particular, he is miſtaken; which is as modeſt as I can ſay of it. For I renounce vilifying an Author on account of a mere Miſtake, as that imperious Perſon Dr. *Blackwell* has done. Who (becauſe he found an Error in Mr. *Miller*'s Works relating to the Situation of a Garden) fell to abuſing him in Print to ſuch a vile

Degree, as if he had been an Impoſtor or a Block-head. But this learned Slanderer, who ſo accurately pretended to ſee a Mote in his Brother's Eye, could not perceive a Beam in his own: For being afterwards invited by the Government of *Sweden* to go there, to ſhew them new Improvements in Huſbandry, (though I doubt his ever keeping a Cow or a Plow of his own) he accordingly went; and became famous for his relieving the King in his Illneſs. But it was not long after, that his Pride, Avarice and Perfidiouſneſs, tempted him to act the Traytor; and accordingly for his ungrateful Treaſon to the *Swediſh* Government, he was beheaded at *Stockholm*, a few Years ago. But to return to our Subject: Experience ſhews that ſuch a hilly Situation may be made to become a very profitable one, if planted with Cyder-apple, and Perry Pear-trees; provided the Declivity of the Hill has not too ſteep a Deſcent. A Proof of this may be ſeen about one Mile diſtant from the Borough Town of *Plymton* in *Devonſhire*; where ten or twelve Acres are thus planted,



in Rows, at twelve Feet diſtant from each Tree; and the Rows twelve Feet aſunder. Here the Cyder-apple

apple or Perry Pear-trees are to be planted on the Side of a Hill, firſt rendered ſomewhat flat by the Operation of the Turnureſt Foot-plow, or by a Spade: If the Ground be too ſteep for the Plow, the Spade muſt be made uſe of. But there are few Hills where two or three Horſes in length cannot draw this Plow, as it has no Wheels, and turns its Furrows all one way, which no other Plow can do; therefore it is accounted the beſt of any for plowing ſloping Ground, where the Surface is ſoft enough to be turned by it. But in caſe the Surface is of the hardeſt ſort, as a ſtony Clay, Gravel, or a Chalk; then the two-wheel Turnureſt Plow is very neceſſary to work it: for a Foot-plow is apt to jump out of the Ground, if drawn through a very hard Surface, whereas the two-wheel Plow will not: Yet there is this Fault attending the laſt. If the ſloping Ground be very ſteep, it is apt to turn over in the drawing; therefore when this two-wheel Turnureſt-plow is employed on ſuch a ſteep Deſcent, a Man ſhould walk on its upper ſide, holding it up by a Cord to prevent its overturning. The five Furrows are ſuppoſed to be five Feet in breadth; the lowermoſt of which, ſhould be firſt plowed deeper and broader than the next; the next to that a little narrower and ſhallower; and ſo on, till the uppermoſt Furrow be plowed narrower and ſhallower than any of the reſt. Such Furrows will ſtop and lodge the Rain-water on the Roots of the Trees, and the interval Graſs-ground; otherwiſe ſmall Showers would be of little or no Service to them. And for doing this the ſurer; the Trees in the ſecond row ſhould be planted againſt the Intervals of the firſt, and ſo throughout the Plantation; the better to break off the Force of Winds, and for oppoſing the too quick Fall and Running of the Water. Here the Apple or Pear-trees ſhould be kept growing with ſhort Trunks which may be done by a little proper Ma-

nagement, becauſe their Growth in courſe will be ſtunted and the Trees ſhort in ſuch a Situation and poor Soil, as the Sides of moſt Hills generally are. This Method of planting the Sides of Hills which are unfit for plowing or mowing, is ſo much practiſed in *Devonſhire*, and in ſome other Parts of the Weſt, that there are few Orchards of Cyder Apples, but what are planted on the Sides of Hills. In the ſame Manner, therefore, may thouſands of Acres of hilly Ground be employed and improved to a moſt high Degree of Profit, to Landlords, Tenants, and to the Nation in general, that at preſent yield only the poor Herbage of a barren common Earth.

A further Account, ſhewing how the Roots of Apple and Pear-trees may be water'd as they ſtand on the Sides of Hills, by Showers of Rain.

THIS I propoſe to do three ſeveral Ways. *Firſt*, by the Plow. *Secondly*, by Gutters, and *Thirdly*, by ſhallow Tubs. *Firſt*, By the Plow. In the firſt Part of this Account I have ſhewn, that by planting Apple and Pear-trees in the middle of five Furrows, it would in ſome Degree break and obſtruct the running off of Rain-water, ſo that its Deſcent will be the ſlower going off ſuch rough a Surface as plow'd Earth, whereby the Roots of the Fruit-trees will be the better water'd. But having directed that the graſſy ſmooth ſurfaced Earth ſhould be left unplowed between the Rows of Trees; I here contradict the ſame, and ſay, that it is much better to plow the whole Side of a Hill with the Turnureſt Plow, and then to begin planting the Fruit-trees in Rows at twelve Feet diſtance every Way, or wider, as the Ground is richer or poorer. For by thus plowing all the Surface of the Earth, and leaving the Side of the Hill always in a rough Condition as the Plow makes it, The Rains will

will be the more impeded in their Deſcent; and conſequently water the Roots of the Trees the more, to the much forwarding their Growth, and the Graſs that will afterwards grow on and amongſt the rough Furrows. An Example of this method may be ſeen in that Part of the Duke of *Bridgwater*'s Park lying next to *Nettleden*; where, on the Side of a Hill there remains at this Day, ſome Acres of Graſs Ground that was laid down by the Plow in four Furrow Ridges, perhaps two, three, or more Centuries ago, and yet remain very viſible at this Time. This is ſuppoſed to have been done on purpoſe to ſtop the too free Deſcent of Rain-waters in running down the Hill-ſides, for the better watering the Graſs that was to grow on the Ridges and in the Furrows; and it has certainly produced the deſired Effect. The ſame Purpoſe likewiſe in ſome Degree is anſwer'd by theſe rough Furrows, made and left by the Plow, though they lye not in Ridges. But ſecondly, That theſe Trees may be ſtill better watered, I have ſhewn in my Draught of planting on the Side of a Hill * as aforeſaid; where by making Gutters or Trenches, cut down from the Trees in the upper Row to the next in the lower one, and ſo on from Row to Row and from Tree to Tree; the Waters will be conveyed to the Platform or Baſon of Earth laid over the Roots of each Tree †. Thirdly, and laſtly, I am to ſhew how theſe Trees may be water'd by ſhallow broad painted Tubs. This needs little Explanation; for it is only placing a ſhallow broad Tub near the Roots of the Trees that will catch the Rain-water and hold it till it is almoſt full; that is to ſay, till the Water runs out of a Notch cut in one or more of the upper Part of the Staves of the Tub. In this Notch a ſmall wooden painted Gutter is to be faſtened, about eighteen Inches

* See p. 34. † See p. 38.

or more long, for carrying off the Water, as faſt as the Tub fills, over the Trees Roots; and then one Tub may be removed from Time to Time for this purpoſe, or ſeveral Tubs may be employed at once on the ſame Occaſion.

Of making Baſons or Platforms of Earth over the Roots of the Apple or Pear-trees.

THE next Thing I have to obſerve is, that where the natural Surface of the Earth is rather too thin to afford a ſufficient Quantity of it for making a Baſon or Platform of Earth over the Roots of the Trees, for receiving and better lodging the Rain-waters, and ſheltering them againſt the Injuries of Froſts and Draughts; ſuch Deficiency may be ſupplied by bringing additional Earth to the Place from other Parts. If the Hill is too ſteep for a Cart, it may be carried in wooden Dung-pots, which are ſhaped like Churns, and hang on each Side a Horſe, as Panniers do, which I have often ſeen done in *Devonſhire*. By theſe alſo, a powder'd Compoſt or Manure may be conveyed to the Platforms or Baſons, for Dreſſing and Manuring from Time to Time the Earth that lyes over the Roots: Theſe Dung-pots are emptied, by unpinning the bottom Board, and then out drops the Dung or powder'd Manure. Or if this be not approved of, the powder'd Manure may be carried in Sacks on Horſes Backs. Thus both Dung or Manure may be waſh'd in, down to the Roots of the Apple or Pear-trees at once by Rains, and cauſe them to flouriſh in Quickneſs of Growth, and in Greatneſs of Produce, beyond all other Fruit-trees that want ſuch artificial Nouriſhment. Here then is acquired the Thing moſt deſirable of all others in Agriculture, *viz.* The making poor thin Land rich and thick, for a mere

mere Trifle of Expence. An Incouragement ſufficient (if ſuch be planted with Cyder Apple, and Perry Pear-trees) one would think, to excite and reward the Planting of them on the Sides of Hills or elſewhere. And when Fruit-trees are planted in this manner, it is one of the beſt Pieces of Huſbandry to keep the Earth about their Roots, in a fine looſe Condition, in order to give the Sun and Air, and Rains, free Acceſs to them, for preventing the Growth and Damage of Weeds and Moſs, for opening the Pores of the barren Earth the better, and for receiving a powder'd Manure into it. This Management is beſt done in Winter; and in Summer, Ferne, Furze, or Horſe Litter ſhould be laid over the Roots, eſpecially while they are young for preſerving them cool and moiſt, but it muſt not be laid cloſe to the Trunks of the Trees leſt it ſhelter and breed Vermin.

The many and great Advantages that would certainly accrue from making Orchards on the Sides of barren Hills.

Firſt, BY ſuch a Method of planting Fruit-trees on the Sides of Hills, they will not produce leſs Graſs, but rather more; becauſe the Rain-Water being thus in a great Degree ſtopped in its Deſcent, the Surface of the interval Earth will become more fertile in producing larger Quantities, than when it lay unplanted.

Secondly, Although the Trunks and Roots of theſe Fruit-trees may take up ſome Room in the Ground, the Quantity of Graſs will not be the leſs, becauſe the interval Graſs may be fed with Sheep; and they by the Shade and Shelter of the Trees will be more invited to feed and lye here, than they were before ſuch a Plantation was made; by which

means the Trees and Graſs will receive the greater Nouriſhment from their Dung and Stale.

Thirdly, Such a Plantation by this Method may be made once for all in the cheapeſt Manner poſſible; for, as it is for the greateſt Part perform'd by the Plow, it may be done in the quickeſt Way, and at the leaſt Expence.

Fourthly, Here is yearly an increaſe of Wood and Fruit, and yet not the leſs Graſs; without any Labour or Expence, beſides pruning the Trees, perhaps once in four or five Years, gathering the Fruit, and making it into Cyder or Perry.

Fifthly, By ſuch a Plantation the Landlord comes in for an improved Rent, and the Tenant likewiſe for an Opportunity of getting by it, Pariſh Rates increaſed, and many poor Men imployed, and their Families ſupported in ſome Meaſure by a cheaper and wholſomer Drink than ſmall Beer, *viz.* Pomepirk, or Water-Cyder, that with the Aſſiſtance of Ginger inſtead of Hops, may keep ſound the greateſt Part of the Year.

Sixthly, As right Cyder Apples or Perry Pears, are naturally of a moſt harſh Nature, hard in Subſtance, and ſo rough in Taſte that Pigs will hardly eat them; therefore there is no danger of their being ſtole.

Seventhly, As Cyder made from the excellent *Caggagee*, the *Whitſour*, or the *Royal Wilding* Apple, *&c.* has ſo potent a Body, that it has been often proved by *Devonſhire* Gentlemen, Drinkers of it, to be ſtronger than *French* White-wine; and ſo pleaſant as to be preferred by many of them to it, (even when Bottles of each have been on the Table before a Company:) If Plantations of theſe right Sort of Apple and Perry Pear-trees, are made in great Numbers; it may be depended on, that a full Plenty of the Liquors made from their Juice wou'd aſſuredly, much leſſen the Importation of foreign

foreign *Tartareus* Wines, and the Exportation of our Bullion for them.

Eighthly, As Cyder and Perry pay a Duty to the King of about ten Shillings *per* Hogſhead, if ſold to the Publican, the Revenue of Exciſe will be much increaſed by it; and private Families that pay no Exciſe, will be furniſhed with an excellent wholeſome pleaſant Drink at the leaſt Coſt.

Ninthly, Where ſuch Sides of Hills by this Manner of planting, yield only Fruit and Graſs, it is beſt to plant and keep Fruit-trees with low and ſhort Trunks; becauſe a greater Number of ſuch may be planted, and becauſe the Shadow of one Tree doth not reach the Root of the other, as that of the tall Tree doth.

Tenthly, The low Trees ſooner attain to be Fruit-bearing Trees, and grow fairer than the tall; the Sap in them waſting in its long paſſage, which in the ſhorter Trees expend itſelf ſoon in the Branches.

Eleventhly, The lower and broad ſpreading Tree is the greateſt Bearer, by reaſon the Bloſſoms in the Spring are not ſo expoſed to the bitter Blaſts, nor the Fruit in the Autumn to the fierce and deſtructive Winds.

Twelfthly, The Fruit is more eaſily gathered from a low than a tall Tree; the practice of beating or ſhaking down Fruit from ſuch Trees being exploded by all judicious Cyderiſts,

Another Way to keep the Roots of Cyder-Apple and Perry Pear-trees always in a moiſt Condition, though planted on the Side of a barren Hill.

LAY over each Platform, a Parcel of Ferne, and renew it at Diſcretion. This being of a ſpungy Nature will lodge and retain Dews and Rains,

Rains, ſo that the Roots of theſe Trees will be always kept in a moiſt Condition, and the Growth forwarded.

The Enemies of Orchards; and their Remedy.

SUCH are Moſs, Caterpillars, Ants, Earwigs, Snails, Moles, and Birds. If Moſs begin to over-run your Trees, look to it betimes, leſt it make them barren; for it has Roots, and exhauſts the Sap of the Trees. In this Caſe uſe a Hair-cloth after Rain, or rub it off with a Piece of Wood formed like a Knife at the End of a long Stick or Pole, which if uſed cautiouſly after Rain will anſwer the end. Some ſmoak Caterpillars with burning wet Straw, Litter, or ſuch like Stuff under the Trees in the Spring-time. When Ants eat the Fruit, anoint with Tar the Trunks of the Trees, to prevent their climbing up. But it is better to pour ſcalding Water into the Ant-hills after they are opened with a Spade, for it ſurely kills them. Earwigs are catch'd and killed by placing hollow Canes half a Yard long in the Trees, which they'll creep into. Snails muſt be gathered early in the Morning. Moles are beſt catch'd by Traps; for theſe ſometimes undermine a Tree and damage its Roots. To keep off Birds, it may be done with prepared Feathers, or with a Wooden Clock or Windmill fix'd at the top of the Tree. Take away as often as they grow up, the Shoots or Twigs that proceed from the Roots of the Trees; for theſe are great Robbers of the Trees Nouriſhment. Some think it good Huſbandry to run a Knife down the Bark of a Tree when it is Bark-bound, for giving it Room to extend itſelf the eaſier. If a Tree be wounded, lay ſome wet Clay or Loam on the Part, and bind it on with Hay-bands. The Canker will ſometimes eat round a Tree, and kill the Heart of it in Time. For this, the beſt way is to dreſs it with

with Cow-dung mix'd with Urine. The ſame Method may be uſed to keep young Trees from Cattle, which are apt to knaw off the Bark of them.

How to prevent and kill Caterpillars, Lice, or Ants on Standard Fruit-trees, and clear them of Moſs and Suckers.

THIS is a ſure way of doing it. Take one or more Brands-end, or what is uſually called Fire-brands, and put them under ſome Straw or Horſe Litter, which will make a Smoak that will aſcend amongſt the Boughs of the Tree, and prevent or kill all Caterpillars, Lice, or Ants on them: It will alſo clear the Tree of and prevent Moſs, deſtroy Worms at the Roots of the Trees, and Suckers, if there be any ſhot up from the Roots. If once doing it will not anſwer, it muſt be repeated. Apples growing on a Moſſy Tree are apt to be chopt, rough Coated, thick Rhin'd, and ill Taſted. In my next Book on *Huſbandry*, I intend to inſert the Draught of a Machine to burn Horſe-litter to a great Advantage for theſe Purpoſes.

How Cyder Apple and Perry Pear-trees, by the Application of a compound Manure, may be made to bear abundance of Fruit, and grow into Perfection in almoſt half the Time that neglected Trees do; and how by the ſame Means Oak and other Trees may be made to grow with the like Advantage.

TO prove that this is an Article of vaſt Importance to the Intereſt of *Great-Britain*, *Ireland*, and all the King's Dominions; I ſhall here inſert ſome Account of the ſame, as publiſhed by Mr. *Trowel* in his *Farmer's Inſtructor*, and by Mr. *Switzer* in his *Country Gentleman's Companion*; who thus write in praiſe of a Manure for which a Patent was obtained to prevent the making and ſelling

ing the ſame by any other Perſon whatſoever than the Patentee. Their Words are as follows, *viz.*

Of an Artificial Compoſt, or Compound Manure.

I Call it ſays one of them, a Matter of the greateſt Utility, that ever entered into the Heart of any private Man to conceive, or Head to contrive, With foul Salt fermented with ſeveral Ingredients, is made a compound Manure for Land, that from certain Experience and Obſervation (on all Sorts of Land) is found to excel all other Manure commonly uſed in Huſbandry. Agriculture (ſays he) is the moſt laudable, neceſſary, and beneficial Branch of human Induſtry, and is, from a moſt learned Science dwindled down to a meer Handicraft, while in Hands commonly illiterate, and incapable of further Improvements. And as the Charges of Dreſſing with the ſeveral Sorts of Manure now in uſe are too expenſive for improving the barren Land now cultivated, this is propoſed for an Encouragement to the laborious and induſtrious Farmer, and alſo for a publick Benefit to all his Majeſty's Subjects in general: For if the Method of making this compound Manure was made public, we ſhould ſoon ſee the Poor fully imployed, our Trade and Commerce flouriſh, the publick Revenue greatly increaſe, the Subject enriched, and Corn, *&c.* become one of the Staple Commodities of *Great Britain*. He adds, that common Manure at preſent is ſo dear and ſcarce; that the Expence to mend one Acre of Land is from three to four Pounds, and upwards; nor is there enough of this to be had to mend one twentieth Part of the Lands which want it. On this Account there are ſeveral Millions of Acres in *Great Britain*, part whereof lye uncultivated, and produce little

or

or no Profit to the Owners thereof; and other Parts are ſo greatly impoveriſhed, for want of a ſufficient Quantity of proper Manure to dreſs and improve the ſame, that many of the Tenants are unable to hold their Farms, having loſt all their Stock and Subſtance thereby, and are forced to leave them in their Landlord's Hands, who can make but little thereof, for Reaſons aforeſaid. But if the Duty on foul Salt (as ſhall be boiled up with proper Ingredients, ſo as to render it unfit to be applied to any other uſe than for Manure) was not to exceed Sixpence *per* Buſhel, and Satisfaction was given the Patentee for vacating his Majeſty's Letters Patents, granted to him for the ſole making and vending his invented Compound Manure; to the end that all his Majeſty's ſubjects may be at Liberty and inſtructed in the Method to make and uſe the ſame without Reſtraint, which they might then eaſily do (the Materials to mix with the Salt, for making the ſaid Manure, being to be had in great plenty in all Parts of *Great Britain*) Then the Farmers might mend their Lands for twelve Shillings *per* Acre at the moſt, and in ſome Parts for leſs. Whereas at preſent, there muſt be ſixteen Buſhels of this Manure imployed to mend one Acre at two Shillings and Sixpence *per* Buſhel; and then it will enrich and improve all Sorts of Land though never ſo barren, and remains much longer in the Ground than any other Culture or Manure whatſoever. It deſtroys Grubs and Worms, Moſs, Ruſhes, Sedge, *&c.* and cauſes Meadow and Paſture Ground to bring forth a rich feeding Graſs in great plenty, and the plow'd Ground to produce very great Crops of Grain of all Sorts, and preſerves it from Smut. It likewiſe kills Slugs and Snails, and all thoſe Inſects which are bred (by Dung) and harbour in the Roots of

young Plants, and eat their tender Fibres which would be entirely prevented by mixing the Earth with this Manure, that greatly increaſes the Growth of all Sorts of Herbs and Roots, and gives them a fine Reliſh. It alſo makes the Vine and Fruit-trees bear abundance of very large Fruit of a fine Flavour; the Forreſt-trees thrive very faſt, and the Hop-vines flouriſh and yield a plentiful Crop, by the Help of this Compoſt, as hath been experienced by ſeveral Noblemen, Gentlemen, eminent Farmers, Gardeners and others, in divers Parts of this Kingdom. Thoſe Fruit-trees (ſays Mr. *Samuel Trowel*) round which I mixed ſome of this Manure with the Mould to come at the Roots, bore Fruit in abundance; ſome of which for ſeven Years before, did not bear any Fruit.

Of the beſt Sort of Devonſhire and Corniſh Cyder-apples, and to plant the Trees according to their Practice.

To plant an Apple-tree in the beſt manner.

THE beſt Seaſon for doing this is at the beginning of Winter, or early in the Spring; ſome think the latter preferable, becauſe the wounded Roots heal the ſooner in Spring, which if planted in Winter, often ſuffer by the Severity of the Weather. The common Rule in the *South-ams*, is to plant Cyder Apple-trees at 20 Feet diſtant from each other, becauſe their Trees are ſuch great bearers, that they ſeldom grow large. The Pit or Hole for the Tree is made a Foot deep. But this is according to the bigneſs of the Roots, and the nature of the Soil. When this is done, put down the Turf with the Graſs-ſide downwards, and upon it lay a well-rotten Compoſt 3 or 4 Inches thick; conſiſting of Sea-ſand, Lime, a little Dung and Earth; all well mixed, almoſt to a Powder. On this

this, lay ſome Virgin-earth, 2 or 3 Inches thick, and plant the Tree on the ſame, after the Roots have been firſt pared at the ends, and freed from the Damage received in the taking them up. When placed in proper Order, they are covered with Virgin-mould about 3 or 4 Inches thick, and then, 2 or 3 Inches more of the Compoſt upon that; which finiſhes the planting. But after this, the Tree muſt be ſecured from the Winds. The beſt Sort of Apples for Cyder are the *Medgate*, *Bachmar*, *White-ſour*, *Corniſh*, *Royal-wilding*, and *Caggagee*: Theſe make the ſtrongeſt Cyder, and are much helped when any of them are mixt with the bitter-ſweet; for that is to Cyder, what Hop is to Beer. The harder the Apple, the longer it muſt be before it is made into Cyder; therefore the *Medgate* and *Caggagee* muſt lie till *Chriſtmas*, and turned in the Heap, once or twice a Week, to keep them from moulding and rotting. By ſuch management, the Juice of ſome of theſe Apples will be equal, if not ſuperior to adulterated Wines. Moſt, or all the Species of *Devonſhire* Apples, I have growing in my Orchard and Fields; which I think juſtly deſerve Mr. *Parkinſon*'s Character that he has given in his Folio Book, where he ſays (page 589) 'That in the Weſt Country, many Tuns of Cyder are made, eſpecially to be carried to Sea in long Voyages, which is found by Experience to be of excellent uſe. It is uſually ſeen, ſays he, that thoſe kinds of Fruit that are neither fit to eat raw, roaſted nor baked, are beſt for Cyder, and make the beſt Liquor; which is very good in Hypocondriac Diſeaſes, as it exhilarates the Spirits, and diſpels Heavineſs.' And I believe I may venture to ſay, It is an excellent Anti-ſcorbutic, and therefore it is far from being a breeder of the Gout, and is only of ill Conſequence, when it is drank to Exceſs.

Caggagee-

Caggagee-Cyder Apple-trees, how planted by the Author.

IN the Spring 1754; I had ſix of theſe famous Cyder Apple-trees, which were about ſix Feet in heighth, ſent to me by Sea as a Preſent, from a Gentleman in *Devonſhire*. I received them well-rooted, and in perfect good Order. The Trunks were a little bending, and the Bark of a delicate fine, bright, ſhining, Cheſnut-colour. After I had ſhortened the Heads, and cut off ſome of the Extremities of the Roots, I planted them thus.

I made a Hole or Foſs, by firſt taking off the Turf to a moderate Thickneſs, which I laid on one ſide; then I took up as much of the next Virgin-mould as was ſufficient to make it deep enough for planting my Tree. Next I laid the Graſs-ſide of the Turf downwards, and chopt the Mould-ſide ſo as to make it light; and upon this again, laid ſome Virgin-mould, bedded the Roots, and planted the Tree in the Hole. This done, I covered the Roots with more Virgin-mould; on the top I ſpread Horſe-litter and Mould over that in Diſh-faſhion; the better to receive and convey the Rain-water to the Litter, and Root of the Tree, and to retain the moiſture ſome time; for thus the wet Litter is in ſome degree like a watering Pot. At laſt, I ſtrewed over the whole, a Compoſt made with four powder'd Ingredients, which being waſhed in from time to time, as the Ingredients contained in them the moſt fertilizing Quality, the Trees grew (tho' planted very late in the Spring) to admiration. Two I planted in my Orchard; two in my Meadow; one on the Graſs *Baulk* of a plowed Field, and one in my Wood; on ſeveral Situations, and different Soils: All well

well ſecured from the Damage of Cattle by Rails, *&c.* In planting theſe Trees, I ſet two in a Clay-Soil, two in a Loamy, and the other two in a Gravelly Soil; in all which, I planted them ſhallow; for planting Trees deep in any Soil I imagine to be wrong, as it is too apt to confine their Roots from ſpreading, and getting their Nouriſhment in the upper and beſt part of the Earth. This is an Error of the firſt Magnitude; the Effect of which, I have often ſeen by the ſmallneſs of the Trunks of Fruit-Trees, and their Barrenneſs: For how ſhould it be otherwiſe when a Fruit-tree is thus crippled, and confined in its Growth? Theſe ſix *Caggagee* or *Cockagee* Apple-trees, I muſt own, I would have planted more in the *Devonſhire* Method, had I lived near enough the Sea-coaſt to have made uſe of Sea-ſand, (as it is a good Ingredient in a Compoſt for promoting the Growth of Trees, and preventing their Roots from cankering) according to the Practice of a *Southam* Planter.

Of the excellent Jerſey, *bitter-ſweet Cyder-apple*; *and the* Snap *Cyder-apple.*

THE *Jerſey* bitter-ſweet Apple is ſo bitter, that it ſerves the ſame purpoſe in Cyder as the Hop does in Malt-liquor, to keep it ſound and palatable. For theſe Reaſons it is admired and greatly valued: And therefore whoever goes about planting an Orchard for Cyder ſhould plant this Tree preferable to ſeveral others. The *Snap* Cyder-apples grow about *North-pereton* near *Bridgewater*, in *Somerſetſhire*. This Apple, with the *Jerſey* and ſome others, make a ſuperlative Cyder, as they ſay here; and if it is the ſame ſort that I have drank at a Stone-Houſe, ſituated on the top of a very high Mountain, between *Taunton* and *Chard*, it is one of the beſt kind of Cyders I ever taſted. Likewiſe the *Red-ſtreak* and *Golden-pippin* agree very well together.

The Golden-pippin, *grafted on the* Red-ſtreak *Tree.*

IN ſome parts of *Herefordſhire* they obſerve this Method; becauſe it is ſaid the *Pippin* will be the larger, and the Cyder made with it keeps a long time if rightly managed. There are ſeveral ſorts of *Red-ſtreaks*, that are all of them of ſo much value for Cyder that no Orchard ſhould be without them; being a low Tree, a conſtant early bearer, that yields a Fruit that is hardly eatable, and conſequently will not tempt the Thief; becauſe the *Red-ſtreak* Apple is a ſort of Wilding, harſh and pleaſant in Taſte, and ſtrong in Quality. It is meliorated, and therefore the better agrees in mixture with milder Apples, as the *Golden-pippin* and others.

Cyder-apples, that by ſome are eſteemed the beſt of all others, for making a ſuperlative kind of Cyder.

THESE are the *Styre* Apple, *Red-ſtreak*, *Fox-whelp*, and the *White* Apple of *Glouceſterſhire*. The laſt of which yielding a Juice that taſtes ſomewhat like that of a Raſberry, is much preferred to be made uſe of in a mixture with the other three, for making (as it is called) the beſt of Cyder. This I only had an Account of from a travelling Perſon I converſed with at *Dunſtable*, on the 17th of *December* 1754; who told me he was juſt come from a Place near *Plymouth* in *Devonſhire*, where he had lived ſeveral Years; but now was travelling into *Cheſhire*, his native Country. That he had made this Sort of Cyder, and it ſo well pleaſed Lord *A——n*, and ſeveral other great Officers, that they declared, they never drank ſuch delicate, pleaſant, ſtrong-bodied Cyder before.

THE

THE COMPLETE

Planter and Cyderiſt.

PART II.

Of making CYDER.

The Apple-Mill.

THE Stone-mill, which is ſuch as the Tanners grind their Bark with, is eſteemed the beſt Sort, becauſe it breaks more of the Seeds or Pippins than the Cog-mills.

The Method of preparing a Caſk for Cyder.

THIS is the firſt Thing to be regarded, as a White-wine Caſk cannot be always had, and that there may be a neceſſity to make uſe of a Beer Caſk; I ſay, in this Caſe, ſuch a Beer Caſk ſhould be firſt well ſhaved all over its Inſide, and then ſcalded two or three Times with Water: Quick-Lime ſhou'd then be diſſolved in it, and afterwards it muſt be perfectly dried before the Cyder is put into it.

The Hertfordſhire *Way of burning the Inſide of a tainted Caſk, as a ſure Cure for the ſame, at a very little Expence and Trouble, which I think is a better Way than what they practiſe in* Devonſhire.

BEFORE I do this I ſhall make ſome Remarks on the Directions of late Authors to cure and prepare Caſks for keeping Cyder ſweet and ſound. *Firſt*, Cyder is very apt to contract any ill ſavour, particularly from new Caſks. *Secondly*, Do not put Cyder into a Beer-Caſk, for it will no ways agree with it. *Thirdly*, if your Veſſel be tainted, put an Ounce of Pepper into Water and fill your Veſſel with it ſcalding hot, and let it remain in it three Days. *Fourthly*, Take Quick-lime, and put it into your Caſk and pour water on it; then ſtop it up and tumble it to and fro. *Fifthly*, Take your ſtinking Caſk to pieces, and ſhave away the Film; when cured ſet it together again. *Sixthly*, Burn a Sulphur Match in the Caſk. *Seventhly*, Obſerve, that although the common round bouged Caſk is moſt ſerviceable for Tranſportation from one Place to another, yet is the upright Caſk (whoſe Ribs are ſtraight and the Head about a fourth or fifth Part broader than the Bottom, and the Height equal to the Diameter of the upper Part) the beſt Form to ſtand in a Cellar. This muſt have a Bung-hole about two inches in Diameter, in the top-Head with a Plug of Wood turned round exactly to fit it: Near this there muſt be a ſmall Vent-hole, ſo that after the Cyder is tunned up, and ſtopt at the Bung, you may give it Vent at pleaſure; and that when you draw it off, you may admit Air into the Veſſel. This Form is preferr'd, becauſe moſt Liquors contract a Skin or Cream on the Top, which much helps their Preſervation. This Skin in any other Form is broken

broken by the ſinking of the Liquor; but in this it is kept whole, which keeps it freſh to the laſt. Now moſt of theſe ways, and ſome others, come ſhort of ſweetning a tainted Caſk effectually. For *firſt*, To boil Pummice in Water to ſeaſon a new Caſk may do well, but not near ſo well as boiling the new Staves in a Copper before the new Veſſel is made. *Secondly*, The Advice indeed is good to omit putting Cyder into a Beer Caſk, and to put it into a Wine Caſk; yet even a Wine Caſk may be an improper one: For a very ſour Rheniſh one, or one a little tainted may not agree with the Cyder. *Thirdly*, To boil an Ounce of Pepper in Water, and letting it lye in the Caſk is but an inſignificant Precaution, even where a Taint is but in a ſmall Degree. *Fourthly*, Putting Limeſtones into a Caſk with water, though ſtopt up and tumbled about, will not cure a Caſk much tainted. But to obſerve further on this important Subject, I have to add, that unleſs we have a clean ſweet Veſſel to keep our Cyder in, all the Labour, Coſt and Hopes will be loſt. The want of this has been the ruin of great Quantities of Cyder and Wines, and thereby diſcouraged many from making ſecond Attempts, partly by miſtaking the Cauſe of it, as when they put Cyder into a new Caſk, a Rheniſh Wine Caſk, or a Beer Caſk, and think they are all fit for the Purpoſe; tho' they ſeldom or never fail of damaging the Cyder or Wine put into them. For firſt, as I ſaid, a Beer Caſk is intirely contrary to the Quality of the pure natural Juice of the Apple, which will not admit of any adulterous baſe Mixture; nothing agreeing worſe with Cyder than Malt, eſpecially when ſtrong Beer has laſt been in the Caſk. The moſt therefore that I can ſay in its Favour is, that a ſmall Beer Caſk does the leaſt Damage. The Rheniſh Wine Caſk is alſo the worſt of Wine

Caſks for Cyder, becauſe it is apt to make it ſour. A new Caſk likewiſe does conſiderable Damage to Cyder or Wine on account of the Sap left in all its Staves and Heads, which certainly will emit their Oaken high colour'd ill taſted Tincture to the Cyder, notwithſtanding the Force of the Fire they uſe to reduce their Caſk to a Bouge: So that if there be not a more effectual Way diſcover'd than any Author has hitherto wrote on, it will be in ſome Degree defective. Therefore I ſhall begin with the Cure of Oaken Staves, *viz.* When the Cooper has ſhaped and prepared the Staves for making the Veſſel, they ſhould be put into a Copper full of cold Water. If the Copper cannot contain the Staves in their full length and covered with Water, they muſt ſtand upright, then after part of their Length is boiled, turn the Staves upſide down and boil them again. When they are cold and dry let the Caſk be made, and ſeaſon it by boiling Salt and Water, and pouring it ſcalding hot into the Caſk; then ſhake it well about, and let it ſtand till it is cold, and its done. This Way of Seaſoning a new Caſk in my humble Opinion, is of ſuch Importance, that it is a pity there is not a Law for obliging Coopers to boil their Staves before they are made into a Caſk, that the nauſeous, if not unwholeſome Sap be entirely extracted out of them. But in caſe a tainted Caſk requires to be ſuddenly uſed, the next beſt Way is to cure it in this Manner, *viz.* Fill ſuch a Caſk almoſt full with boiling Water, and immediately put in by Degrees, Pieces of Quick-lime; and thus you may by Additions of Lime-ſtones, keep the Water boiling in the Caſk, almoſt as in a Copper. Then ſtop up the Bung-hole, and let the Water and Lime remain till cold: When you are to turn it out, rinſe the Veſſel clean with hot, and cold Water. This

Way

Way comes very near to the boiling of the Staves; and as I have duly experienced it, if the Wood of the Caſk is not quite tainted in, it will ſurely recover it. An Innkeeper in *Hertfordſhire* practiſes this Method. He firſt puts his Quick-lime into the Caſk, and then pours boiling Water into it, and ſhakes the Veſſel ſoundly on each Head. When cold, he takes out one of the Heads, waſhes it clean, and ſets it up for the Air to ſweeten. But none of theſe Ways come up to burning the Inſide of a tainted Caſk, for curing it in ſo ſweet a Manner that Cyder may be put into it without receiving the leaſt Damage. Therefore, I here preſent my Reader with two excellent Ways of doing it.

How to burn the Inſide of a tainted Caſk.

HAVING a Beer Barrel that held thirty-ſix Gallons I wanted to convert it into a Cyder Caſk; and to this purpoſe, I made uſe of the *Hertfordſhire* way of burning the Inſide with Wheat-ſtraw to clear it at once of any Taint or Tang, which it might acquire by having Malt Liquor kept in it ſeveral Years together. Accordingly my Cooper began by cutting a Notch in the Top of one of the Staves, and another in the Head of the Caſk, to know the better how to put in the Head exactly in the ſame Place where it was at firſt; then by forcing a Gimblet into the middle of the Head he took it out, and proceeded to waſh the Inſide with Water mixt with Bran, and ſcrubbed the Joints and all the Staves with a Hard-bruſh, till he thought it clean enough to burn it with Straw. To do this, he laid the Barrel at length on the Ground, and putting Straw into it ſet it on fire, ſupplying the Decreaſe of it Time after Time with ſmall Parcels of freſh Straw, till

he had fired its Inſide for above a quarter of an Hour: By which Burning in turning the Caſk now and then, the Fire ſeemed to be gradually ſpent in all Parts of its Inſide, till the Outſide of it felt tolerably hot, by which we knew that the Fire had penetrated quite through the Wood, and overcome any ill Scent it might have contracted: For the Fire had expelled the Tang of the Malt-liquor, and the Cyder proved of ſuch a delicate Flavour as if it had been put in a Caſk which never had any Malt-liquor in it. This is a much better Method than that practiſed in *Devonſhire*, where they burn Wheat-ſtraw to cure a tainted Caſk, by ſetting it upright; for by this Method they not only endanger the burning and cracking the bottom of it; but alſo give room for the Flame to ſpend itſelf in ſuch an upright Poſture, which prevents its ſeaſoning the inſide of the Caſk in every part ſo effectually as when it is confined to burn in an horizontal Poſture.

Another Method to burn the inſide of a tainted Caſk.

A White-wine Caſk is certainly the beſt for Cyder, becauſe ſuch a Veſſel retains the Flavour of the Wine. But a Malt-liquor Caſk muſt be prepared in the following manner, to ſerve for this Purpoſe. Firſt, take out one Head, and when the inſide is filled with Shavings, fire it throughout. Then take out the other Head and ſerve it in the ſame manner. Afterwards put in one Head, and waſh the Caſk well with Water wherein Lime has been boiled; then dry it and put in the other Head, and burn a brimſtone Match in it. Thus it will be made perfectly ſweet and fit for Cyder, or any other Liquor.

A new and excellent Method of making and ordering Cyder, as practiſed in Devonſhire.

LET your Fruit be ſo thoroughly ripe as to fall of its own accord; for ſhaking and beating down the Apples injures the Tree, and cauſes the Cyder to be harſh and eager. Let the Apples be pick'd up once or twice a Week, and thrown in a Heap large enough to make three or four Hogſheads, (Note, we reckon ſixteen Buſhels to the Hogſhead) in ſome ſecure Place without doors, where they muſt be a longer or ſhorter Time, according to the Nature of the Fruit. *Medgate* Apples for inſtance being of a hard kind, require to lie a Month in the Heap; whereas, *Whitſour* Apples being of a ſofter, and more early ſort, A Fortnight for them is ſufficient: The ſame Remark will hold good in reſpect to all other kind of Apples. Let the Apple-heaps be made on a ſlanting Ground towards the South, that the Rain may run from them, and the Fruit may likewiſe have the Benefit of the Sun. To erect a ſlight covering of Reed, *&c.* over the Heap, ſupported by four long Sticks, will be very proper; the fore and hither Part of it fronting the South.

By hoarding up your Apples without Doors you will prevent that muſtineſs they are apt to acquire, for want of a free and open Air.

When your Apples are pounded, let your Murck lie a Day or two before it is preſſed; it will improve the Colour of your Cyder.

When you have put it into Veſſels it muſt be well watch'd for a critical racking; for its quick or ſlow Fermentation, doth chiefly depend on the Weather. It muſt therefore be often tried in a Glaſs, early in the Morning, about Noon, and late at

at Night; till you have given it the firſt racking, which muſt be as ſoon as it becomes fine.

When it hath contracted a red Cruſt upon it, and that Cruſt begins to ſeparate, by means of the white Bubbles which appear, it muſt be rack'd, whether it be fine or not.

When you have rack'd it once, rack it a ſecond as ſoon as it becomes fine; which will ſometimes happen in a Day or two. If you perceive it at any Time in a great Fermentation, which it will ſoon diſcover by its Noiſe, you muſt alſo rack it. As a violent Fermentation is pernicious to Cyder, by cauſing it to run pale, thin, and eager, to rack it is the only expedient to keep it quiet, and to retain the Strength, Taſte, and Colour of it: For Cyder is ſubject to an undue Fermentation, and is conſequently preſerved by frequent Rackings. But tho' ſuch frequent Rackings are abſolutely neceſſary in wet Seaſons, and when Southern Winds blow; yet one or two Rackings in dry froſty Weather may ſerve; and when your Cyder is fine, are as beneficial as five or ſix at other times.

To prevent Waſte, and to diſpoſe Cyder to become fine the ſooner, provide Flannel enough to make ſix or eight Bags, each containing a Gallon and half; let theſe be made like Jelly-bags, and their Mouths be bound round with Tape, that they may the better ſupport the Liquor. Then get a ſtrong Hoop, and having faſtened two Sticks acroſs in it, tie up the Bag, the Hoop being faſtened to a Rope in the Cellar, and the Bags hanging perpendicular over a large Veſſel; pour into them your Cyder which remains in the bottom of your Hogſhead after racking, and which was too foul to be mix'd with the reſt. By this Method abundance of Cyder is preſerved, which otherwiſe muſt be thrown away with the Lees. A Caſk muſt be kept on purpoſe for the Reception

of

of the drained Cyder, into which it ought to be put as ſoon as it is ſtrained, and it will ſerve for common uſe.

When the Bags are grown foul, ſo as not to let the Cyder eaſily run through, they muſt be turned and waſhed, if poſſible in a runningStream, till they are clean, and afterwards dried for farther uſe.

When you have given your Cyder its laſt Racking, and filled your Hogſhead; that its windyEfluvia may be thrown off, you may let it ſtand unbung'd five or ſix Weeks, putting only a ſlight Cover over the Bung-hole, to prevent Rats, duſt, or any other annoyance, from breaking the oily Subſtance or Film, which covers the Cyder. But you muſt be ſure to fill the Hogſhead up to the Bung, that if any light or flying Lees riſe upon it (as it frequently happens to mellow Cyder) they may be removed; for when thoſe Lees are ſuffered to remain, the Surface of them by being expoſed to the Air, will become ſour; and by degrees, they will render the whole Body of the Liquor the ſame.

The common Notion is, that Cyder is a weak, windy, inſipid Liquor; a drink more fit for Women than Men: A Notion that has done infinite Damage to this Nation, and which took its Riſe, and long Continuance, from the weak, ſweet *Herefordſhire* and *London* made Cyders that indeed pleaſe the Palate for Summer drinking, but yet is very unfit for Winter. And it is upon this Account, that the Conſumption of vaſt Quantities of this excellent Liquor has been diſcouraged, and the Importation of foreign Wines encouraged, to the exhauſting of our Treaſure, increaſing the Wealth and Power of our Enemies, the impoveriſhing of Families, and impairing the Health of Thouſands. But I hope, by the Time this Treatiſe has gone through *Great-Britain*, it will

reſcue Cyder from theſe wrong Notions, and cauſe a greater Number of Orchards to be well planted with a right Sort of Fruit-trees; ſo that the *Southam*-Cyder will rival foreign Wines, and become the moſt wholeſome common Drink amongſt us. At leaſt I hope that it will prove the effectual Means (and I think it high Time) to diſcredit and leſſen the common expenſive Practice of adulterating the pure, potent, ſalubrious *Southam*, and *Herefordſhire* Cyders, with Syrrup and Spirits. And that when the excellent, pleaſant, wholeſome Quality of our ſtrong-bodied, pure, natural Cyder is ſufficiently known Abroad as well as at Home, it is to be hoped that there will be as large Exportations made of it into foreign Parts as there is of *Britiſh* Brandy. The Diſtillery Duty in *England* and *Wales* for one Year, from Midſummer 1752, to Midſumer 1753; amounted to 527,829*l.* 16*s.* 2*d.* being 27,000*l.* 11*s.* more than the preceeding Year; and this was owing chiefly to the Exportation of *Britiſh* Brandy into foreign Parts.

How to make very ſmooth Cyder, and prevent its fretting, by racking it, &c.

GAther your Apples and put them into wooden Binns, but do not begin to make your Cyder till about the middle of *November*. Firſt ſeparate the bruiſed or rotten Apples from the ſound ones: This done, grind and preſs them twice; and having ſome large Tubs ſtanding in a Row, pour the Cyder from the Preſs into them, and let it remain there till it ferments and hiſſes, and begins to form a creamy Head. Then rack it off out of one Tub into another by means of a Cock, three or four times, according as the Cyder requires it, till it has done fretting or hiſſing; which you muſt endeavour to prevent as much as poſſible. This is done to prevent the Lees from damaging the Cyder,

der, and to preſerve the Spirit and Flavour of the Liquor. It ſeems the People in the Country where this Method is practiſed, are Strangers to rough Cyder. Good Vinegar is made of the rotten Apples, by letting their Juice ſtand in a painted Veſſel in the open Air.

How Cyder made with all Caggagee *Apples was preſented to his Majeſty King* George, *and much admired by him.*

FEBRUARY 13, 1754. Being at a Bookſeller's Shop in *London*, a grave old Gentleman hearing me talk of Cyder, told me, that at *Weymouth* in *Dorſetſhire*, he, and a Neighbour of his, attempted to make Cyder of all *Caggagee* Apples: That he began to make it pretty early; but his Friend not being able to get Hogſheads, was obliged to keep his Apples till they began to rot before he could begin. The Conſequence of this was, that this Gentleman's early made Cyder became quickly ſour and ſpoiled, when the later made Cyder proved moſt excellent. Now this blundering Accident ſerved as a Monitor to ſhew, that Cyder made from this hard *Caggagee* excellent Apple muſt be made late, even when they are almoſt rotten. Accordingly the next Year this ſame Gentleman made more Cyder from the ſame Apples, after they had lain in a heap, ſweated, and became perfectly mellow: For, as he ſaid, if hard Apples are made into Cyder before they have finiſhed their Sweating, and become thoroughly mellow, even to near Rotting, their Juice will taſte mawkiſh and ſickly. Thus he made Cyder the ſecond Year, that was ſo racy and rich, as tempted him to ſend ſome of it as a Preſent to Mrs. *Scroop*, whoſe Huſband was then Secretary to the Treaſury: And he finding it to be a ſuperior Sort,

Sort, preſented part of the ſame to Sir *Robert Walpole*, and Sir *Robert* preſented it to his Majeſty King *George*, who (as I was informed) much admired it. For as I obſerved in the firſt Part of this Treatiſe, Page 40. Though this *Caggagee* hard Apple, is not eatable as a Table-Fruit, yet it makes an exquiſite yellow colour'd Cyder when mellow, little inferior to Canary.

How to make Cyder for Sale, that ſhall exceed in Strength and Goodneſs, other Saleſmen's Cyder.

BEING in Company with a Diſtiller's Son, whoſe Father lives about thirty Miles from *London*, he told me, that his Father had found out a Method to prevent Cyder from fretting too much; that he never racks it but once, and yet makes it pefectly fine, ſtrong, and palatable. His way is to work the Cyder immediately as it comes from the Preſs with Yeaſt, in order to bring on a quick and briſk Fermentation; and when this is over, to rack it off, and mix with it a prepared Syrrup of Sugar and Brandy. This Cyder he intends for Sale, and is deſirous to commence a Cyder Merchant, not doubting of Succeſs, becauſe (as he ſaid) the bottled Cyder ſold at Public-houſes, is generally ſo weak by their often racking it, that it is but little ſtronger than Water; whereas by obſerving this Method, it will be ſtrong, fine, and ſmooth for Sale. I have ſince been in his Father's Company, who told me that he puts Yeaſt, ſpread on a Toaſt, into the Cyder as ſoon as it comes from the Preſs; and when it has done working or hiſſing, he racks it off the Lees, and then boils ſome five-penny Sugar in a part of it, which he afterwards mixes with the reſt, to the Quantity of twelve Pounds to a Hogſhead. He lets it juſt boil and ſkims off the Froth. When it is cold, he puts this Sugar-ſyrrup with two Gallons of a clean

clean *Engliſh* Brandy, and a Bag of Wheat, into every Hogſhead, and then takes the Whites of ſix Eggs and beats them to an Oil, which is likewiſe ſtirred in every Hogſhead of Cyder. In three Days time his Cyder is extremely fine, and in Taſte reſembled Malmſey Wine. He adds, he did not doubt but that it would keep ſeven Years very well. He obſerved that Iſinglaſs, on change of Weather is apt to move upwards, cauſing a new Fermentation, and weakens the Cyder; whereas the Whites of Eggs will not. The ſame ill Effect ſometimes happens to Wines and Cyders in arched Vaults, where Coaches and Waggons are drawn over them, by the Concuſſions they cauſe. If the Froſt penetrates into a Cellar and freezes any Liquor it will never be truly fine and right good afterwards; therefore he adviſes to lay Horſe-dung at their Cellar Doors and Windows to prevent it.

As to the Method of making Cyder, I have already given you an Account of; but having lately had further Knowledge of this Art, I have to add, that

CYDER ſhould be racked once in twenty-four Hours, or not to exceed forty-eight from the time it runs from the Preſs or Pound. And for the better effecting this, it is the Practice of ſome of our greateſt Cyderiſts to watch it Day and Night, till it is well performed. If it exceeds that Time before it becomes tolerably fine, it is high Time to ſeparate it from its groſſer Lees; becauſe if it once turns on them, as it generally does, eſpecially when made of the weaker ſorts of Fruit, it is ſeldom recovered by Art. This is one of the chief Articles in Cyder-making; but as I ſaid before, ſome ſort of Fruit requires this curious, tho' much neglected, Operation more than others; and I conclude, that ſuch Neglect is the prin-

principal Cauſe of ſo much bad Cyder in general. Two or three Rackings after this are enough; but it depends on the ſort of Fruit, and ſtrength of the Cyder: For it is made rougher or ſweeter, as the Rackings are more or leſs repeated. Cyder commonly alters more or leſs on the change of Weather, to which it is more ſubject than any other Liquor. If the Fruit happens to be over ripe, or a little rotten, it will require leſs racking, if green and under-ripe, more.

To add to the natural Colour of Cyder let the Pummice ſtand eight or twelve Hours before it is ſqueezed, yet not ſo long as to become pricked or ſour: There is alſo another good Property belonging to this Management, which is, that the Pummice by ſtanding thus before it is ſqueezed, it will more freely part with its Juice; and if it remains ſo till it begins to heat, it will not be amiſs; but take Care it does not become ſour.

What Quantity of Spirit, Cherry or Apple-juice will yield in Diſtillation.

AN eminent Diſtiller told me, that one Gallon of Cherry-juice diſtilled in an Alembic will yield a Quart of Spirit; and that three Gallons of Cyder will yield but a Pint of Cyder-Brandy. He told me that Cherry-juice yields an excellent Spirit, and that Apple-juice is next in goodneſs; but Elder-juice yields a fulſome Spirit.

The Manner of Diſtilling the Grounds or Lees of Cyder, as practiſed in Herefordſhire.

IN ſome Parts of *Herefordſhire*, it is a common Practice to uſe an Alembic for diſtilling the Grounds or Lees of Cyder, and extracting from them a Cyder-Spirit. Thirty Gallons of good Grounds,

Grounds, will yield three Gallons of a ſtrong Brandy Spirit, and ſix of a weaker Sort. Cyder Spirit is much preferable to a Malt Spirit, and as an Improvement, you may put the Juice of a few Lemons with the Grounds into the Alembic.

Plumb Cyder.

A *Herefordſhire* Man told me, that he drank at *Lanſdown* near *Bath*, what they call Plumb-Cyder. This Liquor was made of the Juice of Plumbs, and had a bitteriſh ſweet Taſte.

A Liquor made with Apples and Elder-berries.

THE ſame Perſon ſaid, he had known Apples and Elder-berries ground together, and a pretty Liquor made of them. The ſame compound Liquor was made, but in a different manner in *Hertfordſhire*; where a Perſon having made about thirteen Gallons of Cyder, put it into a Tub. On the third Day two or three white Spots appeared on the Surface, each of which was about the breadth of a Shilling, and as the Liquor appear'd fine, he rack'd it off, leaving about three Quarts of Lees or Sediment. The latter he poured over the preſſed Apples then ſteeping in Water in another Tub, in order to make *Pomepirk* or Water-Cyder; but the rack'd Cyder he put into a Cask holding thirty-ſix Gallons, in which he had already put about ſixteen Gallons of ſmall Elder Wine. After this Mixture had been rack'd off and got free of Fermentation; he put ſome Oyſter-ſhells three Times baked and broken into ſmall Pieces into the Caſk, with a Quart of Wheat. In a few Weeks afterwards, as the Shells and Wheat had preſerved the Liquors original Sweetneſs, it

became a pleaſant Drink; and the Taſte of it was a compound of Sweet and Acid.

To make auſtere Apples produce a Mild Cyder.

AFTER the Apples are ground in a Mill, or beaten ſmall in a Trough, mix in every Hair-bag of them, ſome Powder of an unctuous, mellow Chalk, and ſqueeze them in a Screw-preſs, or otherwiſe. The Chalk will keep the Cider from acquiring too much Acidity, and keep it in a wholeſome Condition. Others grind their Apples when they are too ſharp with Chalk in a Stone Mill, for that Purpoſe; for Chalk is a great Alcali, a deſtroyer of Acidity, as may be ſeen by ſcraping a little of it into Vinegar, Juice of Lemons or any other acid Liquor; for it will make a great Fermentation or Working, and after a while take away the Acid Quality of it.

To make a pleaſant Summer Cyder for the firſt Drinking, by an old Receipt.

TAKE the excellent *Parſnip* Apples of *Hertfordſhire*; or Codlings, or any other kind of the Juicy Summer Sort, not too ſweet; for if they are, mix them with thoſe of a little ſharper Nature. Gather them before they are quite ripe, and lay them in Hay or Straw to ſweat two or three Days, then beat and preſs them. This done, boil ſliced Codlings, and Quinces, if at hand, in Water with a few Tops of Roſemary and Blades of Mace, and maſh the Apples when preſſed with this Water, which draw off and preſs again. Mix a fourth Part of this preſs'd Liquor with the Cyder; purge it, and when the Ferment is over, add a Quart of White Wine, or Rheniſh Wine to every ten Gallons. When it is ſettled draw it off, and

and keep it in a cool Place for preſent drinking, for it won't keep right good longer than *October* or *November*. But we Farmers, when we make Cyder of theſe *Parſnip* Apples, do no more than beat and preſs them, and directly Caſk and drink the Cyder forthwith; and the ſame the Water that we put over the Stampings in a Tub, we draw and drink as Pome-pirk. This Liquor cools and refreſhes our Harveſt Workmen to their great Delight: It muſt be obſerved that the Juice of theſe Summer Apples require preſent drinking.

The Method of making Cyder at Dartford *in* Kent.

A Cyder Merchant at *Dartford* aſſur'd me, he always takes care to rack off his Cyder before it ferments or hiſſes much, by which means he prevents it; for (as he ſaid) it is the Fermentation that cauſes the Cyder to loſe its Strength, and brings on Sourneſs. At this Place they make their Cyder of *Redſtreak* Apples and *Pippins*; and after all their Rackings they fine their Cyder by Art.

Mrs. Fenn's *Method of making a Kilderkin of Cyder.*

THIS Gentlewoman lived near *Berkhamſtead* in *Hertfordſhire*; and after ſhe had made her Cyder, and let it ſtand in the Caſk three Weeks, drew it off the Lees, and boiled it. This done, ſhe alſo boiled three Quarts of Water, and poured it on twelve Pounds of Sugar, which brought it to a thick Conſiſtence: When cold, ſhe ſtirred it into a Kilderkin of her rack'd boiled Cyder, which cauſed another ſmall Fermentation; for which Reaſon, ſhe left open the Bung for a Week, and then bung'd it up, leaving a Peghole open for a Vent, till ſhe thought proper to ſtop all cloſe.

About New-year's Day ſhe tap'd, and found it an excellent ſtrong pleaſant Cyder.

The bad and good Effects of mixing of Cyder with Malt.

I Knew a Perſon who uſed to heat Cyder and pour it over a Buſhel of ground Malt, and then brewed it as Malt Liquor; but the Liquor was not ſo good as Mr. *Mortimer* ſays his Friend's was; who having a Hogſhead of ſour Cyder, added ſome Water to it, and brewed it as Malt Drink is brewed, and it proved excellent Liquor.

Method practiſed by a Surgeon living in Hertfordſhire *in making Cyder.*

HE lets his Apples be duly maturated at Gathering, and then ſweated in a Heap about a Month; then (having no Mill) he beats them to a Maſh, and immediately puts boiled Water when cold on them, and lets it thus lye in Tubs three Days, at the End of which Time he draws off the Liquor, and boils Sugar and Ginger together in Water. When this is cold he puts it into his Caſk of Cyder; for he ſays that Sugar is better boiled in Water, than in Cyder, becauſe boiled Water is of an Alcalous Nature, and tends much to the Preſervation of the Cyder. Some who have taſted this Perſon's Cyder, have declared they thought it the beſt they ever drank.

A Buckingham *Farmer's Method of making Cyder.*

THIS Man's Wife is a *Herefordſhire* Woman, and by her Advice, he beats and preſſes his Apples, and puts their Juice directly into a Caſk. Then he warms a Pail full of it ſcalding hot, with ten pounds Weight of Treacle ſtirred in it, but does not ſuffer it to boil; when cold, he puts it into a Caſk, and lets all work and ferment together till the Fermentation is quite over; and then ſtops it up. Thus he manages half a Hogſhead of Cyder, and taps it fine at three Months end.

A Hertfordſhire *Farmer's Miſtake in the Management of his Cyder.*

HE made a Firkin of Cyder about a Month before *Chriſtmas*, 1753; and after letting it ſtand fermenting on its Lees three Weeks with an open Bung, he drew it off: He then boiled three Pounds of Sugar in three Pints of Water, which when cold, he ſtirred into his Cyder, and a Fortnight after he tap'd it. This Cyder I happened to have the Opportunity of taſting, and found it vaſtly weaken'd by the Evaporation of its Spirits; for though he added ſo much Sugar to it, it had a diſagreeable ſweet-ſour Flavour.

Unrack'd Cyder how it proved.

A Man living near *Dachet* by *Windſor*, made a Hogſhead of Cyder and never rack'd it, but let it take its Chance with an open Bung for about ſix Weeks: He then ſtopt it up, and after two Years it proved exceeding ſtrong and mild, like Mountain Wine. This Cask had but two Quarts of Lees; for, as I ſuppoſe, the Cyder ſed

on its Lees, as the Orange does on its Rind. But there is a Difference in Lees of Cyder; the harſher and rougher the Juice of the Apples is at firſt, the leſs Rankneſs there is in them. On which Account ſuch Cyder ſhould ſtand a Year or two before it is Tapped. Hence it is, that Table Apples make the rankeſt Lees, which will not keep ſound and ſweet ſo long as thoſe from the Cyder Apples.

How to make Cyder with Apples and Turneps.

WHILE Turneps are in their young ſweet Growth, grind or beat them in a Trough amongſt Apples, and they'll encreaſe the Quantity of Liquor to Advantage, provided too many Turneps are not made uſe of.

A Farmer's Method of making a Cyder with Turneps and Crabs.

HE beat or ſtampt his Turneps and Crabs together; the Turneps when young, and the Crabs when mellowed by lying in a Chamber or Loft: And when their Juice had ſtood two or three Days in an open Tub, he drew it off tolerably fine, and put it in the Caſk. He then boiled two Pounds of Sugar with one of Treacle in ſome Water, and when cold, mixed it with the Liquor in the Caſk, and made good Family Cyder of it. This is beſt done in *December*.

How a London *Cyder Merchant made his Turnep Cyder.*

A *Herefordſhire* Man that lived with a Cyder Merchant in *London*, told me, his Maſter ground Turneps, Rhind and all, in a Wooden Mill:

Mill: And that if he kept this Turnep Cyder three Months, he fined it down with Stum (which is the Bottoms of Mountain Wine, well impregnated with a Solution of Roll-Brimſtone over a ſtrong Fire, *Secundem artem*) and with Whites of Eggs well whipt or whiſk'd, of each half a Pint, and about a Pound and half of coarſe Sugar well mixt together, and ſtirred into the Hogſhead. Then, two or three Days after, he rack'd it again for Bottling; putting a Tea Spoonful of fine Sugar into each Bottle. This Liquor, however, would keep good but little longer than three Months in Summer; in which Time it would drink very pleaſant, and pleaſe the Palate of a *Londoner* that is no judge of Cyder, who generally approves of that Cyder that will ſooner burſt the Belly than intoxicate the Brain, provided it has the delicious ſweet-acid Taſte. And if it happens that ſuch weak bottled Cyder turns eager with the Cuſtomer, it is allow'd for and return'd; of which they make Vinegar, and thus prevents any Loſs.

How to make a Hogſhead of Cyder out of twelve Buſhels of Apples.

AFTER a Hair Bag full of beaten or ground Apples has been ſqueezed in a Cyder-preſs; ſtir and move the Pummice in it, that it may be all in a looſe Condition; then juſt dip the Bag in cold Water, and preſs and ſqueeze it a ſecond Time; by which Method it will anſwer the Purpoſe. But Mr. *Bradley* carries this Proceſs farther, and adviſes to preſs and diſturb the Pummice three ſeveral Times in the Hair Bag without dipping it at all in Water, and ſays twelve Buſhels of Apples will, if managed this Way, make a Hogſhead of Cyder.

Particular Obſervations relating to Cyder by a Dunſtable *Cyderiſt.*

THIS Perſon lived at *London* with ſeveral Cyder Merchants, and told me that they ſell their firſt and ſecond beſt Apples, and make Cyder of their worſt; but always make their Cyder of Apples only. He ſays he often has with a Phial of a certain Liquor put into a Hogſhead, ſo altered the Taſte of it at once, that its Owner cou'd not know his own Cyder by the Taſte. He adds, that once being poor, and having only one Bottle of Claret, he, with other Ingredients, made two Dozen of Cyder of it, and ſold it in Bottles for thirteen Shillings, tho' he uſed not one Apple. That in *London* they buy all the Wine Caſks they can to put Cyder in, and after once uſing, would ſell them again if they could get more; becauſe theſe, whether Claret or White Wine Caſks, reliſh and ſtrengthen the Cyder. That the Apples on a Hill where the Sun can come at them, make better Cyder than thoſe in Vales; for that the Vale Cyder is weaker juiced. That *Codlings* and *Golden-rennets* make a very good Cyder. He farther ſays, he can make Cyder to keep ſeven Years. That green *Crabs* make Verjuice; but when ripe, make good Cyder. That the *Devonſhire* Apples make the beſt Cyder becauſe they have the moſt Sun. That if Cyder is fined by ſeveral *Hippocratic* Bags, it will loſe its Spirits before it is done: Therefore quicker Racking is to be preferr'd. That the outſide Apples on a Tree make better Cyder than thoſe in the middle. He obſerves that the *Devonſhire* Cyder is not ſo pleaſant as his he makes at *Dunſtable*, though it be ſtronger.

How to preſerve Apples ſound in Winter.

IN *Buckingham* and *Hertfordſhire* their general Way to preſerve their Apples ſound in Winter is to lay Wheat Straw on a Chamber Floor or Bin; and in Froſty weather they cover them with Wheat-ſtraw or Blankets, but in open Weather take them off to give the Fruit Air.

Another Way.

I Know a Gentleman who is ſo curious as to keep his choice eating Apples in Bran.

How to make the beſt Cyder of Crabs.

MIX powder'd Chalk with new Crab-juice, and it will anſwer the End.

Cyder ſaid to be made with Apples, Turneps, and decayed Raiſons.

BY the artful Management of all theſe three Ingredients, it is given out, that a great Quantity of Cyder is made. At a great Town about forty-five Miles from *London*, there lived when I was there, two great Cyderiſts who made vaſt Quantities of adulterated Cyder; ſaid to be made of theſe Ingredients.

Another Way to preſerve Fruit.

AN ingenious Writer ſays, that the Air which is incloſed in the Fruit muſt neceſſarily act upon the Sap, whoſe Coheſion it breaks by Degrees, and occaſions a perfect Intermixture of the Salts and Oils; after which, it ſmooths off the jagged Points of the one by the ſoft Particles of the

the other, and produces in Time a Flavour neither poignant nor inſipid; but an agreeable Combination of Sweetneſs and Acidity, which conſtitutes the Perfection of Fruit. When this Period is once paſt, the Fruit becomes inſipid and fit for nothing but to be thrown away; therefore to preſerve Fruit, the external Air ought intirely to be kept from them, and the Place made as cloſe as an Ice-houſe; for it muſt be neither too dry as in a Garret, nor too moiſt as in a Cellar. He obſerves, that dried Moſs well beaten makes a ſoft Bed, and prevents the Rotting of Apples.

The Method practiſed in the Southams *in the Management of Cyder from the Preſs till the Fermentation is over.*

FROM the Preſs they put it into the Caſk, where it is to ferment till it begins to ſubſide. That is to ſay, the Fall of the Lees is not to be obſerved from the falling of the Head, but after three Days more or leſs according to the Change of the Weather; for it will fine ſometimes in four and twenty Hours, and ſometimes not till a Week or Fortnight. In dark cloudy Weather it holds its Fermentation the longeſt: But in fine ſerene Weather, it will fall its Lees, and ſettle fine in 24 Hours Time, or leſs. This is to be diſcovered by pegging the Head of the Cask about 6 Inches above the Tap hole, and drawing ſome of the Cyder now and then, by pulling out the Peg with a Pair of Pincers, and a Glaſs will diſcover the Alteration of the Liquor; aſſoon as it is but tolerably fine rack it off immediately into a dry ſweet Caſk. Now here great Care muſt be taken in obſerving the Liquor. Therefore for a Week, ten or fourteen Day's Time, more or leſs, try it often; and when you find it fine enough, rack it off into

into the firſt Caſk; though one Caſk may ſerve for this Purpoſe upon a pinch; by racking off the Cyder into an open Tub that is kept intire for that Uſe.

How a Gentleman turned his Cyder preſently into Vinegar.

A Gentleman having made much Cyder, and wanting more Cyder Caſks than he had, put his overplus Cyder into an unſeaſoned Malt Liquor Caſk, and it quickly became Vinegar *. He told me, that he racks his beſt Cyder always three Times: The firſt Time juſt as it begins to be covered with a whitiſh Cream, and ſo on till a Candle's Flame held over the Bung-hole is not diſturbed by the Vapour. As he ſends ſome Hogſheads of Cyder to *Ruſſia*, he puts a Gallon of Brandy into each Hogſhead to preſerve it ſound.

An Account of various indirect Methods made uſe of by ignorant Perſons in the Management of Cyder.

A Gentleman adviſed wrong to get his Cyder fine.

THIS Gentleman who never made Cyder before, aſked Advice, of a Perſon that wanted Inſtruction himſelf, for giving new made Cyder a right Management: This ignorant Perſon's Advice was, firſt to let the Cyder work as long as it would from the Preſs, and then when it had done Hiſſing to rack it off. Others adviſe to dip a Toaſt of Bread in Yeaſt and put it in to force on a Fermentation, and when the Hiſſing is over then to draw it off fine. Both which Methods are extremely wrong. If Cyder is left thus to ferment and hiſs, it will ſometimes continue ſo for four, five

* This Method is practiſed in the *Southams*.

five or ſix Weeks. In the laſt Way, though the Fermentation will be ſhorter, yet will it be more violent; and in both Caſes the proceeding is very pernicious, becauſe by ſo doing the Cyder ſpends itſelf by letting the Spirit of it evaporate in ſuch a tedious, long, or ſhorter violent Fermentation: For then it will ſoon become weak, vapid, ſtale, and often ſour in half or three quarters of a Year. This is the common Miſtake of thouſands, who are apt to think that this Apple Wine requires Fermentation like the viſcid Wort of Malt. Even no leſs an Author than Mr. *Worlidge*, gives too much into this groſs Miſtake in theſe Words, "There is no other Fermentation required in "preparing the choiceſt Cyder, than only expo-"ſing it to the open Air in Earthen Veſſels glazed "within. If you can get as many of them as will "contain the Cyder you intend to make, and ſet "them in Rows on the Ground, and on Benches "in your Cellar, or other Repoſitory; and fill "them with your Cyder from the Preſs, and let "them ſtand open, or but lightly covered four "or five Weeks or more, till the Cyder be tho-"roughly fine."

Whereas there is ſo much Streſs laid on the Management of racking off Cyder at a right Criſis of Time, that in the *Southams* they agree in general that the niceſt Point of making a right good Cyder depends upon it. But ſays an Objector, I am apt to believe that racking off Cyder, eſpecially if it is done twice or thrice, will ſo diveſt it of its Strength, that it will be weaker in Body, than if it fermented as long as it would on its Fæces or Lees. To this I anſwer, that it is a wrong Notion: for as Cyder is a vinous thin Body, its Spirits are much more apt to fly off in Fermentation than a Liquor of a thicker Body. The greateſt Connoiſſeurs in Cyder therefore, to pre-

vent

vent this damage, watch its firſt Settlement with ſuch Diligence, that ſome will ariſe in the Night-time to examine its Fineneſs, by pulling a Peg out of the Caſk and examining it in a Glaſs; and if fine enough, will directly rack it off, and this in two or three, or four Days from the Preſs, and repeat the ſame afterwards as their Judgment directs. But if it be allow'd to ferment on its Lees till it has done fermenting of itſelf, not only the Spirits will fly off, but the Cyder will be tinctur'd ſo much with the earthy Part of them, as never to be free of that unwholeſome and unpleaſant Flavour which ſuch Lees generally give it; for theſe conſiſt of Salt, Sulphur, and much Earth. Therefore Cyder ſo rack'd in due Time will keep much longer ſound than when fermented; elſe thoſe vaſt Quantities which are brought to *London* from *Devonſhire* and *Herefordſhire*, would not remain ſo long ſound as they are known to do when made with a right Fruit, properly managed. Not but that there is a great deal of theſe kinds of Cyder, eſpecially the weaker *Herefordſhire* Sort, that ſoon loſe their Strength and fine racy poignant Taſte; but then they are ſuch as are not made from the right Fruit, or before the Apples have attained to their full Ripeneſs on the Tree, or afterwards their full Maturation by a Sweat; or the Cyder was not rack'd off at a right Time; or made in foul Veſſels, and kept in a bad Caſk; or by ſome other ill Management.

Pome-Pirk or Water Cyder made by the Author.

IT was the latter End of *November*, 1754, that I made ſome Cyder; and with about a Hogſhead of Pummice, that was left after ſtraining the Juice from the preſſed Apples, I put ſome water into an open Tub, and after three Days drew off about eighteen Gallons. In two Gallons of this, I boiled two Pounds of Treacle with a half pennyworth of *Jamaica* Spice about half an Hour; then threw it into the other cold ſixteen Gallons while it was in its greateſt Heat. When all cold I barrell'd it; putting into the ſame one Ounce of powder'd Ginger, and it proved very good, keeping, pleaſant, wholeſome Drink.

Obſervations on the above Proceſs.

IF I had boiled all the Water Cyder, inſtead of only Part of it; the fine ſpiritous Sweetneſs of the Apples had been much leſſened, and a flattiſh codled Taſte introduced in its Room. But by this Proceſs, after the Liquor had been in the Caſk about a Fortnight, and then tapp'd, a delicate, agreeable taſted ſtrong Water Cyder of a tranſparent Fineneſs was obtained. This Management, will keep it ſound and ſweet a long Time; which I think is a far better Way than that practiſed by ſome of our Farmers, who boil ſuch Water Cyder with only Ginger to keep it ſound inſtead of Hops, and work it with Yeaſt in the ſame Manner as they do Ale.

Cyder or double White Wine made and improved by one of the greateſt Virtuoſo's of the preſent Age.

I Come now to ſhew how this noble vinous Liquor, Cyder, may be ſtill made more vinous, palatable and potent; either with or without the Aſſiſtance of Spirits. Without Spirits, by a Method conſtantly made uſe of by Dr. *H*———s as the very beſt Liquor, agreeable to all Conſtitutions and Palates. He makes it thus, *viz.* To about twenty Buſhels of the beſt Table Apples, he adds one Buſhel of mellow Crabs; all firſt paſs'd through a Fermentation by ſweating in a Heap: From theſe, after grinding them, he preſſes a Hogſhead of Cyder; which when it has been preſerved from Fermentation by Rackings, he puts into the Caſk with a whole Frail of Raiſins, that is to ſay, about half a hundred Weight of them Stalks and all. When the Cyder has paſt the laſt ſmall Fermentation by the ſteeping of the Raiſons, then the Caſk may be ſtopped down, leaving only a Peghole open for Vent, leaſt the Caſk and Liquor ſhould ſuffer. In doing this, before the Raiſons are put in, the Forepart of the Hogſhead ſhould be raiſed higher than the Hindpart, that the Raiſons may fall the more backward, for if they fall forward, they'll be apt to ſtop the Braſs Cock. Again, in caſe the Cyder and Raiſons are to lye in an upright Caſk; then the Braſs Cock ſhould be put into a Hole made at ſuch a Height from the Bottom, as that the Raiſons may lye free from ſtopping the Cock; this done, tap the Cyder at three or four Months End and draw it out of the Caſk, or you may bottle it at once. This will be a delicious Cyder, or double Wine; which if you have a mind to improve further, you may do it by putting into the Caſk dulcifyed

cifyed Spirit of Wine; or rectifyed Spirit of Cyder. This Receipt was for the moſt Part approved of by two Phyſicians in *Hertfordſhire*.

Perry made from the Bell-Orange *Pear, and others.*

THIS Pear is of a good Size, is always ripe in Harveſt, and ſerves for eating, baking into Pyes, and for making a Perry for preſent drinking when mix'd with ſome Crabs, or other unripe Apples to leſſen its luſcious Taſte, and thin its thicker Juice. And what is particular in this Pear, is, that while its Liquor is fermenting in the Caſk, on holding one's Noſe over the Bunghole of the Caſk, the Smell is juſt like that of an Orange. But this Perry muſt be forthwith drank, or it will not keep long. However, by making Perry from ſuch an early ripe Pear, it may be made early and late; late, as the Juice of Standard Pears may ſucceed the *Orange* Pear-juice. In *Worceſterſhire*, they have always their *Boſberry*, *Turgovian* and other Kinds of Perry in true mature drinking Order all the Year; and no wonder that they abound in ſuch Plenty of Perry, ſince they have ſuch Numbers of great Pear-trees loaded with this Fruit. One *Boſberry* Pear-tree is ſaid to have yielded three Hogſheads of ſuperlative Perry, and yet will grow and proſper in a ſtiff clayey Soil, or a Loam, a gravel, or in any Sort of Earth except a very brittle poor light Sand. Hence I am led to obſerve, that the not planting of the true Perry Pear, is at preſent a reigning egregious Neglect in moſt Counties in this Kingdom, becauſe of the Value of their Wood, and as they grow in almoſt any Earth and Situation to the greateſt Bulk, if huſbanded accordingly. Of their Safety from Pilferers, as they are not eatable Pears, and of their pyramidical ornamental Growth; a Shape that

many Sort of Pear-trees grow in, I need not take notice. They wou'd likewiſe prove an excellent Ornament to Walks, Avenues and Viſtoes, inſtead of the Beach, the Elm, or any other of the Timber Sorts, which yield little more than a ſingle Profit; whereas the Pear-tree yields a double, nay, I believe I may ſay, a treble one in compariſon of them. I have ſold the Wood of a Pear-tree for Ten-pence *per* Foot, when Elm was but a Shilling a Foot, and indifferent Oak no more. If any Perſon thinks fit to have Grafts from my *Bell Orange* Pear-tree, it may perhaps be well worth their while, ſince this Pear is eſteemed a moſt excellent ſort on account of its ſeveral valuable Services; a ſort that cannot be had of any other Perſon that I know of.

Of Fining, Reliſhing, and Preſerving Cyder.

A wrong Method often practiſed for improving Cyder.

IT is a common way with ſome of the Farmers, to let their Cyder ferment in the Caſk ſix or ſeven Weeks, if it will ferment ſo long, and then rack it off. When it is racked they make a Sugar Syrup, only by boiling three Pounds of Sugar in three Pints of Water, and when cold ſtir it into the Veſſel of rack'd Cyder, containing nine Gallons, and ſo in proportion for a greater Quantity. Such is the Stupidity of ſeveral *Hertfordſhire* and other Farmers, who thus ſuffer their Cyder to loſe its Spirits by a tedious long Fermentation on its Lees, thinking themſelves thoroughly wiſe, if they rack it and pour into it a Sugar Syrup, before it is got crabbed. The Conſequence of which often is, that ſuch Cyder ſeldom keeps ſound the Year round.

An Account given me by a Herefordſhire *Man how to fine and preſerve Cyder.*

HE ſaid (in that Part of the Country where he lived) they put the Cyder into the Hogſhead directly from the preſs, and in about a Week or nine Days after, expect to find it clear. Accordingly they try it with a Syphon, and let it run it into a Glaſs; and if it proves ſo, they draw it off the Lees into another Caſk, wherein it generally remains for good, provided they perceive it fine enough; if not, they rack it a ſecond Time. In order to feed and to preſerve it ſound, they ſew up half a Pint of Muſtard-ſeed in a Linnen Bag, and put it into a Caſk that holds a hundred and ten Gallons, for this, he ſays, is the Size of the Caſks they commonly uſe. Then they take a Gallon of the ſame Cyder, and warm it with a Quart of Treacle; and after they have ſhaken and well mixed it with the Cyder, they tye up a large Handful of Hyſſop, and put it into the Bung-hole of the Caſk; for the Hyſſop, as well as the Muſtard-ſeed and Treacle, is of great Service in clearing and preſerving the Cyder in a ſweet Condition. Wheat, he obſerved, is but an indifferent Ingredient for Cyder to feed upon. Horſe-fleſh or Beef is ſtill worſe, becauſe it gives it a raw, fulſome, fleſhy Taſte, and is apt to breed Worms in it; but that ſome bake a Brick very hard and powder it, then put it into a Hogſhead of Cyder, and that it will feed and fine it. He further added, that ſome of the *Herefordſhire* People mix Sugar and Brandy together and put it into a Caſk of Cyder, for reliſhing and preſerving it; and this they do in Liquor both for Sale and their own Drinking. But in caſe their Cyder becomes prick'd, they make uſe of Stum and Whites

Whites of Eggs in order to give it a gentle Ferment, which anſwers well when there is a quick Draught.

A Moakiſh taſted Cyder, how cured.

STEEP ſome pure Stone-lime in Spring Water; decant off the fine liquid Part, and put it into the Cyder with ſome powder'd Ginger, bruiſed Cinnamon, and ſome Syrup of Sugar, according to Diſcretion; and if you think fit, you may add a little burnt Allum powdered.

To ſtop the Fret and fine a Hogſhead of Cyder.

TAKE a Gallon of the Cyder, and add to it a Halfpennyworth of Allum burnt in a Shovel over the Fire and powder'd; about a Handful of fine Starch, the Whites of eight Eggs, and half a Handful of Bay Salt. The two laſt muſt be beaten together in a Wooden Bowl, or mortar, and put to the reſt. Let all be well ſtirred into the Liquor in the Caſk, and it will make it very fine to the Eye, and briſk to the Taſte; but be ſure to rack it off about three Days after, and bottle it afterwards, unleſs it be for immediate Sale. Thus all Fretting will be intirely ſtopt.

To cure Ropy or Viſcid Wine, or Cyder.

A Travelling *Jew* told me, that his Father was a Wine Merchant at *Franconia* in *Germany*; who, when his Wine became ropy, uſed to put it into a Tub, and ſtir it well with a new Birchen Broom: This cauſed a Froth or Scum to ariſe, and would ſo break the viſcid coheſive Particles of the Wine, that when it was poured again into the Caſk, it would in a Week's Time ſettle, and might then be drawn off quite clear and fine. Cyder may be cured in the ſame manner.

How to improve Cyder with Raiſin Stalks.

IF you pour ſome boiling Water on Raiſin Stalks, and let them ſoak a Day or two, and then mix ſome of this Liquor with the ground Apples in every Bag, it will increaſe the Quantity of the Cyder (if the Raiſin Stalks are freſh) and greatly improve its Quality.

To improve Cyder with Sugar-candy, by a particular Receipt.

AFTER it has been ſufficiently rack'd off, ſo that the Fermentation is quite over; boil ſome Sugar-candy in a Fire-ſhovel without any Liquid, and put it into the Caſk: But I think as Sugar-candy has already been prepared by Fire, the Fire-ſhovel Operation is needleſs. But every one to their own Fancy.

An Account of a conſummate Impoſition practiſed by an Innkeeper, who ſold an artificial Red Wine for true genuine foreign Red Port many Years without being miſtruſted.

THIS Perſon kept a Publick Houſe or rather an Inn, that ſtood amongſt half a Dozen other Houſes in a Country Village, near a large Pariſh Church; which, being thus conveniently ſituated for the Reception of Gentlemen and their Coach and Saddle Horſes, was commonly much frequented both by the higher and lower Sort of People. This gave the Landlady an Opportunity of ſelling large Quantities of ſeveral Sorts of Liquors. One Sort was an artificial Red Wine that ſhe conſtantly kept by her, and generally ſold in quart Bottles for two Shillings a Bottle, as true

true net, red Port Wine, and acquired great Profit by ſuch a Sale for many Years, without being ſuſpected. The Ingredients ſhe made uſe of were as follows.

She firſt made Red Elder Wine, by ſoaking the Berries in cold Water; then ſhe ſtrained and boiled the Liquor with fivepenny or ſixpenny Sugar, and work'd it with Yeaſt ſpread on a Toaſt. When it had ſettled it was drawn off fine. She had ready by her ſome Sloe Liquor, which ſhe made by boiling the Sloes till they broke, then ſtraining off the Liquor. Now her Method of making this Red Wine, was by mixing Elder Wine, Sloe Liquor and *French* Brandy together in the following Proportion. To make a Quart of Port, ſhe put a quarter of a Pint of Sloe Liquor to a quarter of a Pint of *French* Brandy, and when ſhe had ſweetned theſe with a proper Quantity of Sugar-candy, added to them a Pint and half of the Elder Wine. And this Compoſition was ſold at two Shillings *per* Bottle for genuine red Port Wine. But for furniſhing herſelf with a Quantity of this artificial Red Port, ſhe uſed to put the leſs Sugar into her Elder Wine at firſt, becauſe of the Sugar-candy to be mixt with all the three Liquors afterwards; and that ſhe might have it always ready, ſhe filled ſeveral two Gallon Kegs with it, and drew it off by a Cock as ſhe wanted it. How ſhe made her Elder Wine I can't juſtly ſay; but ſuppoſe it to be done by ſuch a Receipt as this famed one, *viz.*

Take half a Buſhel of Elder-Berries pick't, and half a Peck of Blackberries to a Firkin or nine Gallons of Water. Steep them for five Days, Stirring them every Day; then ſqueeze the Berries with your Hand, and ſtrain them through a Sieve, and to every Gallon of Liquor put three Pounds and a half of Sugar. Then put it into a Copper

with the Whites of ſix Eggs well beaten, and let it boil an Hour and a half very faſt. Then put it into a Tub and let it ſtand till next Day, and draw it off and put it into a Caſk. Cover the Bung-hole with a Piece of Paper; and when it has done Hiſſing,, ſtop it up for good, and in *March* following bottle it.

Had this artificial Red Port Wine been made by a Receipt I know of; it would have been as ſtrong, as pleaſant, and perhaps more wholeſome than genuine foreign Wine: For in making this, there is required forty-ſix Gallons of Cyder; the reſt to fill up the Hogſhead, muſt be two Sorts of genuine Liquors free of any manner of Sweet whatſoever. It will coſt about ſix Pounds the Hogſhead. This Mixture renders the whole ſo near the Colour, and Quality of neat Red Port Wine, that he muſt be a great Connoiſſeur that can diſcover the Difference. Hence may appear the great Neceſſity there is of making Plantations with the right Sort of Cyder Apple and Perry Pear-trees with the utmoſt Expedition, that our Nation may be furniſhed with the moſt pleaſant and moſt wholeſome Liquor the World affords at a moderate Expence.

To Preſerve and Reliſh Cyder.

BOIL a Pound and half or more of Sugar in Turnep Juice, and when cold put it into a Hogſhead of rack'd Cyder. It is a wrong Method to put Brandy into Cyder, becauſe it overcomes the fine Reliſh of the Apple, unleſs it be the true *French* Grape Brandy.

To prevent Cyder from turning ſour.

ABOUT *Boddenham* in *Herefordſhire* within five Miles of *Hereford*, a Perſon told me, that they make the beſt Cyder in that County, and that they grind their Apples mixt with Chalk with the great round Stone Mill, as in *Devonſhire*. But they only practiſe this Method when they miſtruſt the Apples will produce a Cyder that will not keep. Others put powder'd Chalk into each Bag of Pummice and ſqueeze it amongſt the ground or beaten Apples. Powder'd Chalk put into a Mug of Beer, on ſhaking, will ferment ſo as to make it run over, becauſe the Beer contains an acid, and the Chalk an alcali.

To take off the Sourneſs of Cyder.

FUME a Caſk well with a Brimſtone Rag, and rack the Cyder in upon the Smoak. Then take a Pail-full of Cyder, and mix with it a Quart of Oyſterſhell Powder, one Pound of the fatteſt Chalk or Whiting in Powder, Bean-flour a Quart, Grains of Paradiſe bruiſed four Ounces; and put theſe all into a Hogſhead of Cyder. The Oyſter ſhells muſt be baked four Times after Bread, and the white Part of them only powder'd.

To prevent Sourneſs by Muſtard Seed.

MUSTARD Seed prevents Cyder from turning ſour, and makes it the more wholeſome. If for preſent Uſe, the Seed ſhould be bruiſed, tied up in a Rag, and put into the Caſk of Cyder.

How Cyder is rack'd and preſerved in Herefordſhire.

THEY let moſt of their Cyder Apples lye in Straw to give them a Sweat, which happens in leſs than a Week's Time. They rack it three Times; after this they put into a Caſk of about thirty Gallons of Cyder, a Quart of thick courſe Sugar Syrup, and a large Slice of lean Beef. The beſt Cyder is made between the City of *Hereford* and *Ledbury*, with a Mixture of the *Woodcot* Apple and the *Redſtreak*.

Cyder, how made at Croſley *near* Town-Malden *in* Kent.

'THE ſooner you make your Cyder, the more doctering it wants,' is a Maxim here. Therefore they let their Apples lye in a Heap till about *Chriſtmas* before they preſs them; and at the End of two Months they bottle it off: But by making their Cyder thus late, they think they loſe almoſt a third Part of the Apple Juice. But when I drank Cyder at this Place, I thought the Goodneſs of it made them ample Amends for the Loſs in the Quantity of the Liquor.

Cyder made early and late; difference of the two Sorts.

A Gentleman near *Darking* in *Surry* bought a Waggon Load of the fineſt Apples, all or moſt of them hand-pick'd from the Trees, and ſent them to a Cyder-maker to have them directly preſſed as ſoon as it could be done; which accordingly he did; and was to have all thoſe Apples that fell, and were ſcattered about the Orchard for his Pains. Theſe he did not gather till near *Chriſtmas*, when he preſſed them, and made excel-

lent

lent Cyder of them: Whereas, the Cyder that was made early of the ſame Apples, ſoon turned ſour.

Cyder, how made at Elminſter *in* Sommerſetſhire.

IT is there made with the ſweet *Jerſey* and the *Redſtreak* Apple, half one and half the other, and tapped in the Spring. But they ſay, if they make Cyder of all *Redſtreak* Apples, it would be three Years before it were fit to be tapped.

A London *Surgeon's Scheme for improving Cyder.*

RESERVE, ſays he, all the Juice of the Apples by itſelf. Then put cold Water enough on the Preſſings to make a thick Maſh. Let it ſtand forty-eight Hours, and expreſs the Liquor; which boil with a ſufficient Quantity of broken freſh Prune-ſtones, ſliced Figs and Raiſins, to the Conſumption of a third Part. Strain it off into Coolers, and, when thorough cold and fine, add it to the Cyder in the Caſk. When the Fermentation is entirely over, and it is fit to be racked, make an artificial Feed or Lee with a Quart of good Wheat, a Pint of freſh-ground Bean-Flour, and an Ounce of Grains of Paradiſe, to a common Hogſhead. The Wheat ſhould be well dried with a gentle Heat, and put in whole. The Grains of Paradiſe are to be reduced to a groſs Powder, and mixed with the Bean-Flour, both to be wetted with a little of the racked Cyder, and made up into two or three Balls of a ſtiff Conſiſtence. All which muſt be put into the full Veſſel of racked Cyder, without ſtirring, and directly bung it up cloſe; only leaving a Peg-hole open in the Top of the Caſk for a Day or two. This, he is of Opinion, will keep to a good Age, in a briſk and more ſpirituous, and better reliſhed Condition than ordinary Cyder.

Cyder

Cyder how made about Berkley *in* Glouceſterſhire.

THEIR Practice here is ſaid to let Apples hang till they are ripe; then ſhake them down, ſtamp or grind, and preſs them directly: By this way they ſuppoſe they get more Juice which is more ſpirituous, than that from Apples kept in a Heap and ſweated; for this is done, ſay they, to ſupply their want of full Ripeneſs on the Tree. The Ripeneſs of Apples is known by their black Kernels. The Windfalls they ſtamp and preſs directly for immediate drinking, as it is the worſt Cyder. Here they have a Notion, that *Golden-pippens* and *Golden-rennets* make good Cyder.

Perry made early in the Year.

THIS may be done by the following Receipt printed in ſeveral Books, *viz.* Take *Orange* Pears, *Katherine* Pears, and ſome Winter Pears, but none of them over-ripe, quarter and core them; ſoak them in boiled, warm ſugar'd Water. Then take them out, maſh and preſs them with ſome of the Water, put into the Hair Bag with the Stampings; and if you think fit, you may ſqueeze the Stampings, water'd as aforeſaid, a ſecond Time. And if the Perry is of too thick a Conſiſtence or too ſweet, the Receipt further directs, to diſſolve two Ounces of Cryſtal Tartar in a Quart of *Rheniſh* Wine or Cyder, which is to be put into the Caſk of Perry for fermenting and fining it; and after the Fermentation is pretty well over, and the Perry is fine, rack it into another Caſk, or bottle it.

This

This Receipt I muſt own is in part good, but I can't conceive how theſe Summer Pears can be kept ſound long enough to mix with Winter Pears, unleſs the latter are made uſe of in their green Condition from the Tree. My famous *Bell-orange* Pear is always ripe in Harveſt, and the *Katherine* but very little later, perhaps a Month or more before the Winter Pear; and then the two former will become too mellow and ſpungy for preſſing to advantage. However, this may be done to anſwer the Purpoſe, *viz.* Beat and ſqueeze ſome Winter Pears afterwards, when they have got to a ſufficient maturity or Ripeneſs, and adding their Juice to that of the Summer Pears in the Caſk to thin it, and give it a briſk Flavour: Or Crab-juice may anſwer the ſame End, as I have often experienced.

Perry made late in the Year.

IN *Herefordſhire*, the *Bareland* Pear is generally looked upon as the beſt Pear for making Perry, which they ſometimes mix with Crabs; and after letting the Juice remain in a Caſk a Year or two, it becomes good ſtrong Perry. But in *Worceſterſhire*, where they make more of the beſt Perry than in any other County, of their hard choaky Pears, they uſe the ſame Method as in making Cyder. This Perry, by length of Age, acquires a very potent vinous Body, for the rougheſt Pears make the beſt Perry, as the rougheſt Apples make the beſt Cyder: And if we believe Mr. *Worlige*, a Wine of Pears is more full of Spirit than that of the Apple, and eſteemed a greater Cordial. And no wonder it is ſo, ſince it is allowed, that the choaky *Warden* Pear, when baked and ſweetned, is accounted a Reſtorative in Conſumptions. Thoſe Pears, of the riper Sort, ſhould be ground as ſoon as

gathered; others that are very rough and hard, ſhould lye till a little mellowed before they are ſtampt and Ground, either dry, or ſteeped in a little Water. And as Perry maketh more Lees than Cyder, it ſhould be managed as Cyder, and carefully cleared from them. If then Perry be rightly made, it is by good Judges ſaid to be no ways inferior to Cyder. Perry made from rough Pears is of an aſtringent, binding, corroborating Nature, and refreſhes a Man more than Cyder: However, it is apt to cauſe Cholic Pains, as it ſtayeth longer in the Stomach than Cyder, unleſs the Pears are well mix'd with Crabs, and a due melliorating Age given the Liquor. If Pears are too mellow they are ſo pulpy, that they will not eaſily part with their Juice. A Perſon by drinking Old Perry has been known to void Gravel and Stones great in Quantities.

To make Pear Wine of Perry.

TO a Firkin of Perry, that has been made from the right choaky Perry-Pear, in a ſound Condition, after it has been in the Caſk for ſomeTime, put five Ounces of the Juice of Clary, *French* Brandy or other Spirit net, with a Pint of the Syrup of Blackberries. Let the whole ſtand together ſix Weeks, or two Months before bottleing, and it will prove a fine Sherry-like Wine.

As to the making Wine from Currants or Gooſberries, Royal Cyder or Apple Wine; it is done by mixing together Syrup of Sugar, Cyder and Brandy. And how to diſtil this Brandy, I ſhall ſhew as follows.

Of

Of diſtilling Spirits or Brandy from Cyder; and of the Herefordſhire *Method of doing it.*

THE Spirits or Brandy that may be diſtilled from Cyder are very good; and it is to be obſerved, That even the moſt ſtale, or crabbed, nay ſour Cyder, provided it is not Vinegar, will yield the greateſt Quantity of Spirits, if ſuch ſour Cyder has paſſed a Fermentation; for unleſs it has been once fermented, nothing will come out of the Alembic but fair Water. Again; In caſe you were to put Sugar into the Still with Cyder, and fill it up with Mead, Metheglin, or Moloſſes; if the Liquor be not firſt fermented, neither Spirit nor Sweets will come out of it: The ſame may be obſerved of any other Liquor. Here alſo I am to obſerve, that the Juice of the *Wilding*-apple, and even that of *Crabs*, will yield twice as much Spirit as the *Codling*, *Parſnip*, *Jenneting* ſweet Apple, or other luſcious Apples; or, at leaſt, much more than any of the Table ſort. And if ſuch Spirit or Brandy be twice diſtilled and rectified, it will become an excellent ſort. Nor will the Spirit of the moſt luſcious ſort of Apples, be better than thoſe diſtilled from *Crab*-juice. For let the Liquor be ſweet or ſour when put into the Alembic, the Flavour will not ariſe with the Spirit, becauſe it is left behind in the earthy phlegmatic Part of the Cyder. And what is alſo very extraordinary, there is ſuch a Spirit in Apples, that if the Rind or Pairing of them be ſteeped three Days in as much Water as will cover them, and then preſſed again, and the Liquor fermented, it will, in diſtillation, yield a Spirit or Brandy; and ſo will the Grounds or Lees of Cyder, which, if mixt with common Cyder, will yield a ſpirit equal in Strength to foreign Wines.

Wines. On this Account (as I have before obſerved) it is, that the *Herefordſhire* Farmers and others ſave the Lees of their rack'd Cyder, and the Grounds in their Cyder Veſſels; and when fermented, diſtil them in an Alembic, and this Spirit ſerves to ſtrengthen their Cyder at pleaſure, even to make it of a double Strength; or, what with the Aſſiſtance of a Sugar-ſyrrup, may be called (according to Sir *Jonas More*) Cyder-royal. Thus as he ſays, you may improve a *Currant*, *Gooſberry*, *Mulberry*, or any other *Britiſh* Wine, to what degree of Strength you think fit; ſo as to give it a leſſer or greater Strength, according to the Seaſon of the Year, and to pleaſe the Palate, *&c.*

Spirits or Brandy diſtilled from a Mixture of Cyder, and Grounds of Malt-liquor and Treacle.

OTHER Spirits, beſides thoſe diſtilled from Cyder only, will anſwer the purpoſe of ſtrengthening your Cyder, provided they are drawn fine; tho' not quite ſo well as the Spirits drawn from Liquor of the ſame kind. Spirits diſtilled from Ale or Beer are the moſt improper, unleſs the Ale or Beer be mixt with Cyder before the Spirits are drawn off. Therefore to make Brandy for the aforeſaid Purpoſes, mix ten Gallons of Cyder, Grounds of Cyder, or Perry Lees, with twenty Gallons of ſtrong Beer Grounds, and four Gallons of Treacle: and if you will add Lees of white or red Wine, it will bring off the better Spirits. But take care to ſtrain your Grounds through a hair Bag if they are too thick, leſt they burn to the bottom of the Still; and let them lie four or five Days fermenting, keeping them ſtirred now and then, which prepares them for diſtilling. Thus when Cyder comes to be plentiful, there may be as much good *Britiſh* Brandy

Brandy made thereof as may furniſh the Nation, both for Land and Sea Service, which perhaps may ſave ſeveral hundred thouſand Pounds a Year. One Pint of good Spirits to one Gallon of weak Cyder, will make it as ſtrong as *French* Wine; and a Pint and half will make it full as ſtrong as *Spaniſh* Wine. Put not theſe Spirits with the Sweets into your Hogſhead till the Cyder is racked for the laſt time, and free from all Fermentation; then mix an equal Quantity of Sweets and Spirits together, and ſtir them well with a Staff put in at the Bung-hole for a Quarter of an Hour; after which, ſtop it up cloſe, and do not draw off any of the Liquor for three or four Months. Two Quarts of Sweets, and three of the Spirits of Cyder, has been put into a Six-gallon Caſk of ſimple Cyder; and after lying three Months, it has been found to be as ſtrong and pleaſant as *Canary*. This Perſon informs us, that Sweets are as well made from courſe as from white Sugar, by clarifying the Syrrup; and that ſuch Sweets will coſt but five-pence a Quart. He obſerves alſo, that perhaps our greateſt Wine-Bibbers will by no means change theſe foreign Liquors for Cyder; becauſe, ſay they, the Quantity we are to drink will make us Sick, before it will make us Merry. To this he anſwers, That it is undoubtedly true of the common ſimple Cyder; but if you will pleaſe to conſider the Strength of it, you will find no Room for this Exception againſt our Cyder-royal.

How a ſtronger-bodied Cyder than ordinary may be made from Apples, without the Aſſiſtance of Sugar or Spirits, or any other Ingredient whatever.

THIS may be done, by expoſing a Caſk of Cyder to be frozen, and drawing out the middle part of it, or by uſing the Juice of ground

ground Apples laid on Sieves, as it is diſcharged from them only by their own Weight; or by preſſing the Pummice in ſo gentle a manner, that the ſtrongeſt and pureſt Juice may fall from them, which will make a very ſtrong Cyder. Thus a Perſon may acquire the ſtrongeſt Cyder, free of any expenſive, unwholſome Sugar and Brandy Mixture, and in that Perfection of Flavour and Body, that there needs no additional Ingredient to improve it.

A neceſſary Caution to be obſerved in making Cyder, given the Author by a Virtuoſo.

AS ſoon as the Juice runs out of the Preſs, put it into one or more Tubs, and there let it remain till ſome white Spots appear on it: then rack or draw it off carefully, taking care the white or creamy Spots do not ſink into it; for if they do, they will become mouldy, and give your Cyder a bad Taſte.

How to ſtrengthen and preſerve a Kilderkin or half Hogſhead of Cyder.

BEAT up the Whites of 5 Eggs very thin, with their Shells; then take 1 Spoonful of Pearl-aſhes, half a Quartern of ſweet Spirit of Nitre, as much Spirits of Wine, 1 Spoonful of powder'd Ginger, and as much Powder of Orrace-root, with 3 Pounds of Sugar made into a Syrrup. Mix all theſe well with half a Hogſhead of rough Cyder, and it will fine it down in 24 Hours, give it a fine Reliſh and preſerve it ſound a long Time. Some boil Sugar in Turnep-juice to make Syrrup for this Purpoſe.

Another,

Another Improvement of Cyder.

AFTER Brandy has been taken off black Cherries, pour Cyder or Pomepirk on them.

Of boiled Cyder in Devonſhire.

A Gentleman in *Devonſhire*, boiled two Hogſheads of Cyder till they were reduced into one, and kept it two Years in the Caſk, then bottled it, and it was near the Colour of Claret and as ſtrong; for boiling it in Copper adds a deep Colour to any Liquor, and yet will not taſte of the Copper, if boiled way apace with an equal Fire, and immediately poured out of it as ſoon as boiled enough. But if the Fire ſlackens, and it ſtands but a little while after it is boiled it will taſte of Copper; witneſs the Syrrup of *Quinces*, which the Apothecaries make in their Copper Pans, but always take Care to put it into ſome other Veſſel to cool as ſoon as it is boiled enough, becauſe the Acid would aſſuredly ſo far corrode the Copper as to give the Liquor a metalline Taſte, and poſſibly an emetic Quality.

Of boiled Cyder in Hertfordſhire.

IN *September* 1754, I made half a Hogſhead of Cyder with the forward, ripe, famous *Hertfordſhire* (for I never heard that this Sort of Apple-tree grows any where elſe) *Parſnip* Apples, that yield much palatable Juice. But as it would not keep of itſelf in right Order, longer than five or ſix Weeks, I boiled it half an Hour, with an Ounce of bruiſed Ginger, half an Ounce of *Jamaica* Spice, and one Pound of Treakle. After it was rackt off its Lees once, and given it to feed upon, it kept three

Months, till the Winter Apple-Cyder was ripe. It is a wholſome, pleaſant Cyder. Fine Sugar is the beſt, but the coarſer ſort, or Treacle, may be uſed: It muſt not be put into the Caſk with its groſs Lees.

How a ſerviceable Strong-bodied Cyder may be made uſe of in his Majeſty's Navy, as Seamen's common Drink, which will better preſerve their Healths, than the ſmall Beer uſually allowed them.

ON this Account, I am in the firſt Place to obſerve, That, if my aforeſaid Schemes of planting Cyder-Apple or Perry Pear-trees on the Sides of barren Hills, in Woods, Hedges, and on the Graſs *Baulks*, that ſurround incloſed plow'd Fields, are put in Execution; we ſhould ſoon have a noble ſalubrious Liquor in ſuch plenty as to be equally cheap with common ſmall Beer. It may then be eaſily conceived, how vaſtly ſerviceable it would be to our Seamen in the preſervation of their Healths, and for enabling them to perform their watchful Labours with the greateſt Vigour and Gladneſs of Heart. For if the common *Devonſhire* Labourer thinks it a Repaſt, when he enjoys a Toaſt in warm Cyder on a froſty Morning (as they ſurely do) ſo as to invigorate his Body to withſtand the Cold, and perform his Work with the greater Eaſe and Pleaſure; ſurely this ſtrong Sort of Cyder or Perry *, will have the ſame Effect on the common Sailor at Sea. For although it is the Notion of Thouſands, who are Strangers to *Devonſhire*, that no Cyder has ſuch an inebriating Quality in it, as that a Quart of it will intoxicate a weak Brain; yet it is nevertheleſs true, as the *Devonſhire* Cyder frequently proves by its effects.

* See the Method of making ſuch ſtrong-bodied Cyder above.

This

This excellent Apple-wine is much preferable to foreign White-wine for Strength and Flavour, and for its healthful Qualities; this muſt give the greateſt Invitation for drinking it. And as for the common Apprehenſion, that Cyder is a cholicky liquor, it will vaniſh, as ſoon as the potent Effect of this Strong-bodied Cyder (if it be the right Sort) is felt in the Stomach. For this will not only convince the Drinker of his error, but alſo make him believe it an Antidote againſt the Cauſe of that horrid Diſeaſe the Cholic; as well as that reigning *Engliſh* Malady the Scurvy; to which laſt, no Perſons are more ſubject than the common Sailors, becauſe they are, more than any other Set of Men, obliged to feed on ſalt Proviſions, and to drink ſmall Beer that is too often impregnated with the earthy, phlegmatic ill Qualities of Malt and Hops; as have been plainly demonſtrated*. That ſuch beer greatly contributes not only to the cauſing of larger Quantities than ordinary to be drank for quenching their Thirſt, but alſo is, next to ſalt Meats, the occaſion of breeding and increaſing that lamentable Diſtemper the Scurvy. This Diſtemper frequently proves an extraordinary Expence to this maritime Nation in maintaining ſick Seamen on board of Ships, and in the King's Hoſpitals at Sea-port Towns; which in a great meaſure may be prevented, by furniſhing every Man of War with ſuch a Quantity of this ſtrong-bodied Cyder as will be ſufficient to quench the Drought of the Men, which it does beyond any Liquor whatſoever. It will warm their Stomachs, comfort their Hearts, and become a ſure prevention of Diſeaſes; and if they happen to be wounded, their Wounds will

* In a Treatiſe on Brewing, intitled, *The London and Country Brewer*; ſold by Meſſ. *Aſtley* and *Baldwin*, at the *Roſe* in *Pater-Noſter-Row*, *London*.

moſt certainly be healed in leſs Time, with leſs Pain and Expence, by thus making Apple-wine their common Drink, which may be quickly and eaſily done by the aforeſaid Schemes.

Of Perry.

THE *Longland* Pear which grows plentifully, about *Bodnam* near *Hereford*, is a very juicy one, makes the beſt and pleaſanteſt Perry for immediate Uſe, and is fit to be tapped in ſix Months. But the beſt for keeping is the *Catſtail* or *Richford Goldings*.

The *Catſtail* is reckon'd the beſt, but if you mix this and the reſt together, it makes a better Perry than any one ſort alone.

The *Barlond* is a Pear but of late come into eſteem, and makes a good Liquor.

The *Glover*'s Pear yield much juice, but of a very indifferent Colour.

There have been many Hogſheads of Perry carried by Waggons to *Worceſter* to the Diſtillers to draw a Spirit from it, which is ſold for ten Shillings *per* Hogſhead; and a great many Hogſheads are ſpoiled by the Heaps rotting, in a cheap Time, for want of Veſſels to put it in.

How Perry was made, to counterfeit Canary.

THIS Receipt was communicated to me by Mr. *Mortimer*, who was Secretary to the Royal Society at *London*. He ſays, that when he lived in *Hertfordſhire*, a poor Man brought him two or three Buſhels of Pears which were very ſmall, hardly bigger than the ſmalleſt Crab, and had ſomething of a muſkiſh Flavour, yet ſo rough in Taſte that the Hogs would hardly eat them,

them, which, ſays he, made me think them good Perry Pears, and accordingly I made Perry of them; which was ſo rough the firſt Year, that no body would drink it. But I found, as the Roughneſs wore off, the fine Flavour increaſed; ſo that at four Year's End, it had the Colour of *Canary*, and was as ſtrong, and had as fine a Flavour, being admired by all that taſted it. But as the Man that brought them to him died before he knew the Excellency of his Liquor, he could not be certain of what Sort the Pear was, as he might, if he had had his Directions; there being three or four Trees cut down in the Field where he gathered them. Since that time Mr. *Mortimer* told me, he got ſome Grafts of a Pear juſt like it for Shape and Taſte, which he believed to be the ſame; but having removed the Grafts to Stocks planted in a different Soil, he found the Roughneſs of Taſte wore off, and that it became a pleaſant-taſted Pear; and therefore he believed it would not make ſo good a ſort of Perry as that pear did. But as he planted them in a Field, he complained that his Neighbours would not let him have a Quantity ſufficient to try the Experiment.

THE END.

ADVERTISEMENT.

IF any Perſon wants to procure any of the right Sort of *Southam*-Cyder Apple-trees, the Author can furniſh him with Grafts, at a proper Seaſon, and ſend them ſafe to any Part of the Kingdom, ſo that they ſhall ſucceed well. Any Perſon chooſing to take a View of the Author's Plantation of Cyder Apple-trees will be welcome to ſee it *gratis*.